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Re: docket number AMS-AMS-22-0026, **Competition in Food Retail and Distribution Markets and Access for Agricultural Producers and Small and Midsized Food Processors**, June 15, 2022; pp. 15194-15198 of the **Federal Register**

The following is in response to USDA's request for comments regarding **Competition in Food Retail and Distribution Markets and Access for Agricultural Producers and Small and Midsized Food Processors**, published March 17, 2022 in the Federal Register. Farmer-partners, faculty, students and staff have worked on supply chains for local and regional food at the University of Wisconsin - Madison for nearly three decades. This has been accomplished through the Center for Integrated Agricultural Systems (CIAS), a participatory action research collaboration between community partners and faculty, staff, and students at the University of Wisconsin and the College of Agricultural and Life Sciences (CAL S). The Center is a partner on Grassland 2.0, a multi-year USDA-NIFA supported project, led by the UW-Madison in collaboration with University of Minnesota and farmers, landowners, non-profits, local, state and federal agencies, focused on research and action to assemble the building blocks of ecologically, economically, and socially resilient agricultural systems, including specific work on developing supply chains to support agroecological transformation.

CIAS is partnering with multiple institutions and stakeholders to conduct network analyses of food movements and geographic concentration of food. One project investigates the national flow of meat and dairy and the other investigates fresh produce availability in a Frontier And Remote (FAR) region where food access is low. Early findings indicate geographic concentration in supply chains, creating bottlenecks and uncompetitive wholesale markets resulting in predatory market conditions and low access to refrigerated products.

The Grassland 2.0 project focuses on what is needed to support farmers engaged in pasture-based animal agriculture in the Upper Midwest region (WI, MN, MI, IL, IA, MO). One thrust of this program is to address just transitions from current farming systems to more sustainable farming systems. Researchers interviewed 127 farmers and others who do work that intersects pasture-based agriculture, education, and supply chains, most of whom were from the Upper Midwest region. Findings from these interviews related to retail competition and concentration are included in this document as well.

In our earlier comments to the Request for Information on “America's Supply Chains” (No. AMS-TM-21-0034) (86 FR 20652) we requested that USDA and other relevant agencies and where necessary, Congress, update, monitor and enforce new rules for 21st century food systems to manage systemic risks across supply chains.

“Market rules need to be updated so that they respond to the many technological advances of the last fifty years that have changed how food moves, how information flows through the food system and how the Nation responds to the risks we face in this century. New government rules to support competitive markets must be accompanied by systems-based monitoring and robust enforcement. Competitive markets are fundamental to food system resilience because they add redundancy to the food system through self-organization. That is, competitive markets are those that have the right conditions for new businesses to emerge and flourish in response to community needs.

Improving information flow is a high-leverage strategy to develop resilience in the food system. For a regional food economy to thrive, we need democratized information infrastructure that improves supply chain transparency, protects data, ensures affordable access to data and digital tools and allows for data portability to reduce information asymmetry. All businesses in a supply chain need access to the information in that chain, not only the businesses most able to pay for it.”

Policy Responses

(2) How do concentration and size in the food retail and distribution markets affect the ability of agricultural producers and processors to access the retail marketplace? Are agricultural producers and SME food processors that serve local and regional markets affected differently? Are there regional and other demographic variations to any of the impacts? Please describe specific experiences and challenges, if possible.

(17) Are there any other aspects of the regulatory environment that affect retail market competition and access to retail for producers and SME processors? Are there specific elements of these requirements that could be more effectively tailored? What types of resources would be helpful to assist SMEs with compliance?

Concentration in the processing industry has led to the proliferation of extremely large processing plants. These plants are regulated in the same way as SME processors, making it difficult for new, and particularly smaller processors to stay in business. For example, an owner of a SME processing plant in Wisconsin who was interviewed for the Grassland 2.0 project shared that because the same regulations applied to large processors were also applied to him, his costs were inherently higher, and that these costs got passed along to consumers as well.

Many interviewees in the Grassland 2.0 project also shared that consolidation in processing industries has created a lack of processing capacity and decreased the accessibility of processing facilities, particularly for small and medium-sized farms. Consolidation in dairy processing has led to higher milk hauling costs. Likewise, many Midwest farmers raising animals for meat report having to schedule a processing slot before their animals are born and to drive many hours to

processing plants. This is putting farmers out of business, discouraging beginning farmers, and presents an animal welfare concern as longer trips to processing facilities put more stress on the animals.

For many beginning or underserved farmers, raising smaller animal species is an easier, less-costly entry point into farming than raising cattle. However, accessing processing for animals like goats and sheep is even more challenging due to higher processing costs, the different technical skills needed for processing smaller animals, the lack of access to specialized processing facilities like Halal processing, and processors increasingly specializing in a single type of meat. While access to processing for smaller animals is often more difficult, accepting a wider variety of animals can create an economic opportunity for processors by helping to reduce bottlenecks due to seasonality in processing for beef cattle.

Regulations around processing plant certifications are also exacerbating issues with access to meat processing. Only ~25 states allow state-certified meat processing facilities in addition to those certified by the USDA, which reduces the number of processing options. Another barrier is that certain markets require farmers to use USDA facilities. This includes farmers who wish to sell across state lines or through Federal institutional purchasing programs (e.g., Tribes who wish to supply meat to their communities through the FIDPR Federal food distribution program).

“These meat giants are so powerful. They've just monopolized so many different things that it's really hard for anybody else to compete...they can come in and they can name their price [and] you won't have anybody else to sell [to] because [they're] your only market. By owning the processing facilities they've monopolized on many levels. There's not a choice for the farmer anymore. Then there's not a choice for the worker anymore. We don't have the small butcher shops in our little towns, there's not a choice...There were record beef prices during COVID at the grocery store [while] all the farmers were getting record low prices [because of the processing bottlenecks]...[The companies] trick the price so the farmer doesn't get paid a fair wage” –Pork farmer, Wisconsin

“One of my friends called me a couple weeks ago he said, ‘my business has been great, I'm making money at it, I've got a great customer list. But...if I've got no place to process [the cattle], I'm out of business,’ and so he's literally leaving the business. Others, they're just holding back on production. [The processors] can't meet the demand, they're just turning people away. Yeah, it's a shame when there's an economic opportunity like that and people are having to pass it up.” –Agricultural lender, Wisconsin

“If I were to tell the farmer, ‘start doing this and you won't even be able to butcher for two years.’ That would give somebody pause to think 'even if I do this right, can I process it and sell it?' That's an issue.” –Livestock farmer, Wisconsin

Interviewees proposed the following solutions

- Regulate SME and large processors differently
- Hire more USDA inspectors for meat processing plants

- Build more USDA-certified facilities, easing restrictions on state/local facilities, and easing restrictions on which facilities farmers can use based on their end-consumers (e.g., Local Processing Act, PRIME Act)
- Provide funding for SME processors e.g., through the Food Supply Protection Act or the Value-Added Producer Grant program

(5) How are workers, consumers, other small businesses, communities, and others along the food supply chain affected by concentration or potentially anticompetitive practices in food retail and distribution markets? What effects do concentration and potentially anticompetitive conduct have on food prices, quality and safety; distribution and accessibility to healthy foods, and food and nutrition security; and worker empowerment, equity for underserved producers, and environmental sustainability?

Interviewees in the Grassland 2.0 project emphasized that the consolidation of agribusiness retailers has allowed companies to lobby for policies that support their bottom lines by externalizing costs they would otherwise pay onto taxpayers. This enables further consolidation to the detriment of small and mid-sized farmers, agricultural workers, and the public.¹

For example, it has been estimated that between 1997 and 2005, subsidies for corn and soy production have saved Tyson \$288 million per year on feed costs for chicken, alone.² Unsurprisingly, the meat processors have spent a great deal of money lobbying to protect these policies.³ The structure of corn and soy subsidies (currently supported through crop insurance programs) externalizes costs that companies would otherwise pay onto taxpayers and the government. Because crop insurance covers both price and yield loss, the cost of the crop insurance program increases as production increases and prices drop, meaning that taxpayers increasingly front market costs that would otherwise be borne by industry: between 1991 and 2017, taxpayer subsidies for crop insurance have increased from \$300 million to \$6.1 billion.⁴

Policies like crop insurance also exacerbate inequities, making it difficult for small to mid-sized farmers, farmers of color, beginning farmers, and farmers farming non-commodity crops to stay in business. Crop insurance is structured to benefit large, commodity farms and CAFOs (which provide the cheap products that large benefit agribusiness retailers) over smaller farms or farms raising grass-fed livestock or other types of crops. It is the only Farm Bill program structured such that payments are linked to acreage and not capped or adjusted for income. As a result, the largest, wealthiest farms receive the highest payments. In 2017 and 2018, only 4.1% of US farms were classified as large, very large, or corporate, yet these farms received half of the crop insurance payments.⁵ These farms are then able to access more credit and outbid smaller farmers for land, exacerbating farm consolidation and land access issues for beginning farmers. Moreover, it creates a market environment that

¹ Howard, P. H. (2019). Corporate concentration in global meat processing: The role of feed and finance subsidies. *Global meat: Social and environmental consequences of the expanding meat industry*, 31-53.

² Starmer, E., Witteman, A., & Wise, T. A. (2006). *Feeding the factory farm: implicit subsidies to the broiler chicken industry* (No. 1434-2016-118836).

³ Howard, P. H. (2019). Corporate concentration in global meat processing: The role of feed and finance subsidies. *Global meat: Social and environmental consequences of the expanding meat industry*, 31-53.

⁴ <https://sustainableagriculture.net/blog/farm-subsidies-encourage-big-get-bigger/>

⁵ <https://www.conservationfinancenetwork.org/2020/04/08/the-case-for-crop-insurance-reform>

disincentivizes farmers from growing anything other than commodity crops, externalizing the steep environmental costs of corn/soy production and raising animals in confinement onto taxpayers and farmers. For example, the cost of soil erosion due to corn and soy in Iowa is estimated to cost Iowa farmers \$1 billion per year.⁶ The emphasis on corn/soy production as opposed to more nutritious food also supports the proliferation of cheap, highly-processed foods which contribute to the obesity epidemic, disproportionately impacting the health of communities of color.⁷

Crop insurance also disproportionately benefits white farmers over farmers of color. Because of a long history of discrimination against farmers of color white farmers tend to own larger expanses of higher quality land.⁸ This allows them to more easily grow resource-intensive crops such as grains and oilseeds. As a result, white farmers grow 98.6% of all grain and oilseed crops and receive 97.8% of all government payments.⁹

“Crop insurance came along and ethanol came along, and that sucked the life out of grazing here in Illinois, because that puts a floor under what you're going to make or props prices up.”
– Beef farmer, Illinois

"I know so many farmers that just are pretty much completely fed up with cash crop farming. More and more farmers are not being profitable in farming grains [but] whenever grain prices go up, we see land taken out of pasture planted to corn...there really isn't as big of an economic motivation on transitioning away from corn and beans when we still have federal crop subsidies and crop insurance...There is a safety net for those farmers that is really hard to break free from. There are no other government safety nets for grazing. Nothing that compares to the subsidies given to grain farmers." --Non-profit employee, Iowa

“Even the large ag farmers [are] on welfare...If they don't get supplements (crop insurance) from the government, they will die.” –Farmer, Illinois

“I think crop insurance [is] what's kept the land price up around in our county. If you took that away, maybe I could have had cattle in this county, but at \$12,000 an acre ground, you just can't pencil having cattle let alone even row crop at those prices, especially if you're starting out.” –Beef farmer, Illinois

Particularly in the meat industry, many farmers' profits have shrunk and consumer costs have increased as corporate profits have grown. This creates a false tension between farmers and consumers and farm owners and workers which can obscure the role of corporations in creating this tension. As farmers' profits decrease, many farmers struggle to pay their workers a living wage. They

⁶<https://www.desmoinesregister.com/story/money/agriculture/2014/05/03/erosion-estimated-cost-iowa-billion-yield/8682651/>

⁷ Morland, K. & Wing, S. (2007). Food Justice and Health in Communities of Color. *Growing smarter: Achieving liveable communities, environmental justice, and regional equity*. 171-188. And Alkon, A. H., & Agyeman, J. (Eds.). (2011). *Cultivating food justice: Race, class, and sustainability*. MIT press.

⁸ Horst, M., Marion, A. Racial, ethnic and gender inequities in farmland ownership and farming in the U.S.. *Agric Hum Values* **36**, 1–16 (2019). <https://doi.org/10.1007/s10460-018-9883-3>

⁹ Ayazi, H., & Elsheikh, E. (2015). The US Farm Bill: Corporate Power and Structural Racialization in the US Food System. *UC Berkeley: Othering & Belonging Institute*. Retrieved from <https://escholarship.org/uc/item/55v6q06x>

may also become increasingly reliant on price premiums (such as organic or grass-fed) that a large number of consumers can't afford, limiting the accessibility of healthy, environmentally sustainable, and/or locally-produced food.

“When I was in high school, the farmer received on average 45 cents of every dollar the consumer spends. Today the farmer is receiving...16 to 18 cents...Where has that 30 cents gone to? It's basically went to the middleman, whether it's private corporations or private individuals. They're building their wealth very fast, where the farmers are not. So really the consumer is paying too much for the products they're receiving versus what the farmer is receiving.” –Dairy farmer, Wisconsin

“I think it's hard to have a just food and farming system if we don't redistribute some of the wealth from the massive corporations that profit off the food system. I think we get stuck in the weeds of talking about farmers versus farm workers and small business owners that don't want to see the tipped wage go away, [and] we ignore the fact that there's so much money being made in the food system all the time, every day. No matter what the economy looks like, money's being made in the food system...we need to be breaking up...those monopolies that make it so everyone down the line just gets pitted against each other...The money is not coming down the line in the food system, yet the food system is profitable.” –Professor of Food Studies, New York

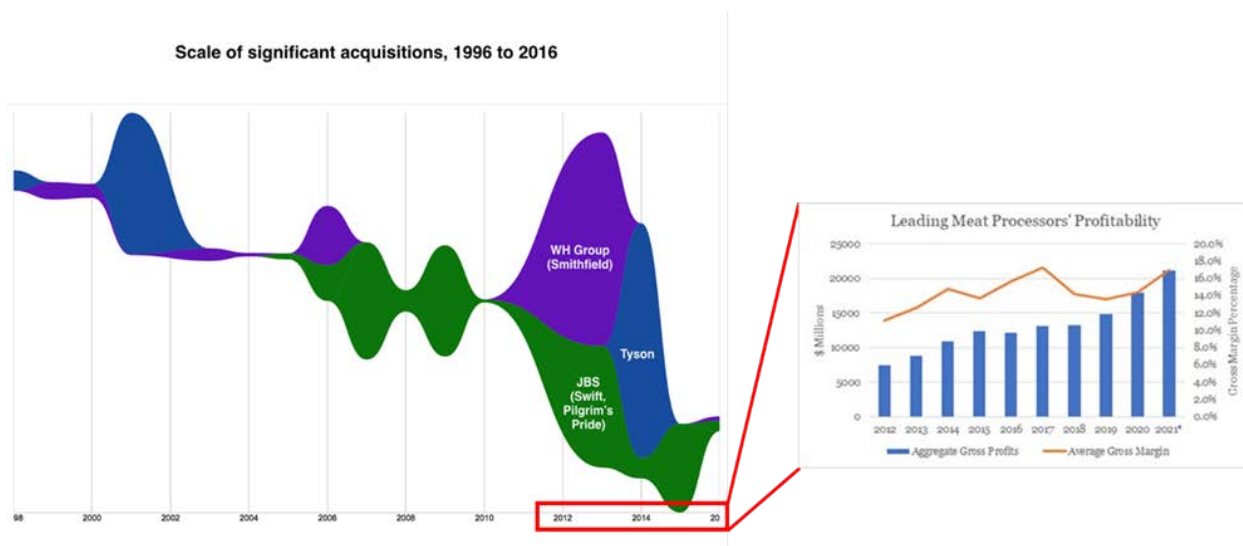


Figure 1. Data from [Phil Howard](#) (L¹⁰) showing significant acquisitions across the three largest meat processors in the US combined with [White House data](#) (R¹¹) on meat processors' profitability during the same time period.

Concentration in the meat processing industry makes it easier for companies to exploit and underpay workers. Consolidation increases the ability for companies to lobby for limited workplace protections and decreases workers' bargaining power. As companies consolidate, it becomes easier to fire dissenting workers and recruit a workforce that is less willing or able to organize (e.g., immigrant

¹⁰ <https://philhoward.net/2017/06/21/consolidation-in-global-meat-processing/>

¹¹ <https://www.whitehouse.gov/briefing-room/blog/2021/09/08/addressing-concentration-in-the-meat-processing-industry-to-lower-food-prices-for-american-families/>

labor) and it limits workers' ability to choose a different company with better workplace conditions. As a result, meat processing has gone from a middle-class job to an incredibly hazardous and low-paying profession. Union membership among meatpacking workers has dropped from 90% in 1952 to 18% in 2020, and wages have fallen from \$25/hour in 1974 to \$19 per hour in 2021, adjusted for inflation.¹² This is also a racial justice issue as the majority of the labor force in meat processing is black or Latinx immigrant workers.¹³

Today, the meat processing industry is one of the most dangerous industries, with workers frequently experiencing debilitating injuries from repetitive stress or exposure to chemicals as well as horrific injuries involving amputation or death. Workers in some processing plants are prevented from basic necessities like the ability to take bathroom breaks and workplace safety is poorly regulated with no set of workplace protections specific to meat processing. Moreover, OSHA fines for workplace violations amount to just a tiny fraction of company profits (e.g., \$40-\$175,000 fines for multiple violations resulting in worker deaths, compared to companies with several billion dollars in annual profits), doing little to incentivize compliance.^{14, 15} The costs of underpaid workers and healthcare hazards in the workplace are also increasingly externalized from companies onto taxpayers, as underpaid workers are forced to use emergency room services for health emergencies and rely on food assistance and subsidized housing.¹⁶

Industry consolidation also decreases food security and increases waste throughout the food system. As we saw during COVID, consolidation in industries such as meat processing can exacerbate the spread of diseases and can cause supply chain disruptions when plants experience shutdowns due to worker illnesses or food safety issues.¹⁷ This also causes financial challenges for farmers, particularly those raising animals in confinement as input costs, e.g., from feed are high (pasture-based farms are more resilient because their input costs aren't as high, enabling them to afford to keep animals for longer during crises). During COVID this created massive food waste and animal rights issues. For example, at least 300,000 hogs were euthanized, wasting those animals' lives as well as the resources used to grow them and removing 29,000 tons of pork from the food supply.^{18, 19}

(15) Describe the role that label claims and labeling standards play in access to retail markets for agricultural producers. Are public or private resources sufficiently available for smaller agricultural producers seeking to develop or use labels? Do labels standards, verification, and enforcement appropriately support access to markets for agricultural producers and SME processors? Are there any instances when a larger supplier used, including potentially misused, a

¹² <https://www.theguardian.com/environment/2021/nov/16/meatpacking-industry-covid-outbreaks-workers>

¹³ Ibid.

¹⁴ Ibid.

¹⁵ https://www.splcenter.org/sites/default/files/Unsafe_at_These_Speeds_web.pdf

¹⁶ Ayazi, H., & Elsheikh, E. (2015). The US Farm Bill: Corporate Power and Structural Racialization in the US Food System. *UC Berkeley: Othering & Belonging Institute*. Retrieved from <https://escholarship.org/uc/item/55v6q06x>

¹⁷ Dickerson, A. M. (2022) Protecting The Pandemic Essential Worker. 85 Law and Contemporary Problems 177-199

¹⁸ <https://www.agri-pulse.com/articles/14018-number-of-hogs-euthanized-due-to-covid-19-impacts-still-unknown>

¹⁹ https://farmaction.us/wp-content/uploads/2021/05/Hendrickson-et-al.-2020.-Concentration-and-Its-Impacts_FINAL_Addended.pdf

label to gain market access or advantage over smaller producers or SME processors? Please share concerns and recommendations, if any.

Interviewees in the Grassland 2.0 project expressed frustration with current country of origin labeling laws which allow meat raised in other countries but processed in the US to be labeled as a US product. These laws limit marketing opportunities for US farmers raising grass-fed animals and deceive consumers who want to support American farmers, however they have remained in place largely due to lobbying from multinational meat companies.²⁰

“The grass-fed sector...is greatly impacted by...country of origin labeling. When you go to a market store...so much of our grass-fed beef is coming in from other parts of the world and labeled ‘product of the USA.’ That's a confusing piece for consumers. [If amendments were made to country of origin labeling laws] we would be able to tell (consumers) that their beef is coming from the United States and that's something they can really believe in and be assured of.”
–Conservation professional, Illinois

“[Country of origin labeling laws allow meat from other countries to] flood the market [and] severely undercut U.S. production... There are plenty of brands...bringing those products without really telling the full story.” –Agricultural finance professional, Wisconsin

(18) How can antitrust and market regulation and enforcement, including relating to mergers, unfair practices, and price discrimination, do more to address competition concerns in food retail and distribution markets? Should Federal and state antitrust enforcers place greater emphasis on adverse consequences of buyer power? Should greater attention be paid to information asymmetries and preferential access to data? How could USDA utilize its regulatory and enforcement authorities more effectively?

Much of the work to date on concentration in the food system focuses on concentration of ownership. CIAS research looks at geographic concentration and its impact on supply chains. This analysis is accomplished through publicly available data, open-source algorithms, and coupled with qualitative methods. These are the means by which large companies manage their proprietary data and information and plan their own operations and networks to achieve their business goals. We suggest that the public sector would benefit from similar network planning to support public goals, such as supporting competitive wholesale markets in low food access regions. USDA-AMS could provide such analysis on a five-year basis, coinciding with the release of Commodity Flow Survey data. This would assist policy makers in monitoring progress and targeting public investment in moderating market concentration.

Megan Konar at University of Illinois at Urbana Champaign and colleagues have developed a method to assess food flow using Commodity Flow Survey data. She and CIAS worked together to curate the CFS data to get a snapshot of meat and dairy supply chains for 2017. Cold chain products moving by truck were pulled out of these CFS data. We used data for SCTG 5 (meat, starting at the abattoir and moving to market) and SCTG 7 (a proxy for the full dairy supply chain). Konar’s lab then downscaled CFS data to represent county-level nodes using machine learning. The network statistics were then

²⁰ Howard, P. H. (2019). Corporate concentration in global meat processing: The role of feed and finance subsidies. *Global meat: Social and environmental consequences of the expanding meat industry*, 31-53.

generated and applied to understand the supply chain network structure in 2017 for these two key food categories.

Centrality is one key logistics algorithm that private companies use to determine strengths and weaknesses in their proprietary supply chains. It is a measure of the importance of a node to the overall network. This study looked at how connected counties are to other counties and their importance in the overall supply network. Early findings on geographic supply chain concentration for the dairy industry are telling. We found that large scale dairy supply chains are concentrating in these counties, factoring out differences in county acreage and population density:

- Imperial, CA
- Inyo, CA
- San Bernadino, CA
- Chataqua, NY
- Kern, CA
- Shelby, TN
- Fayette, TN
- Tipton, TN
- Webb, TX
- Riverside, CA
- Philadelphia, PA

These eleven counties represent the “brittle edge” of dairy supply chains and in 2017 were critical to the flow of dairy nationwide. Should they be directly disrupted, downstream impacts to dairy availability could be considerable. Every effort should be made to ease the reliance on these counties for dairy and support geographic resilience by ensuring fair market access to regions spread out across the country.

Using the network statistics generated by this analysis, it is also possible to compare regional differences in supply chains. We compared the dairy supply chain centrality of ten counties in the Los Angeles region to thirty-two counties in the Minneapolis region, again controlling for acreage and population density. Four Southern California counties overshadow all the other counties: Imperial, San Bernardino, Kern and Riverside. Policy to readjust geographic concentration is needed to ensure system resilience.

2017 regional comparisons for dairy: counties with higher centrality have more control over the network

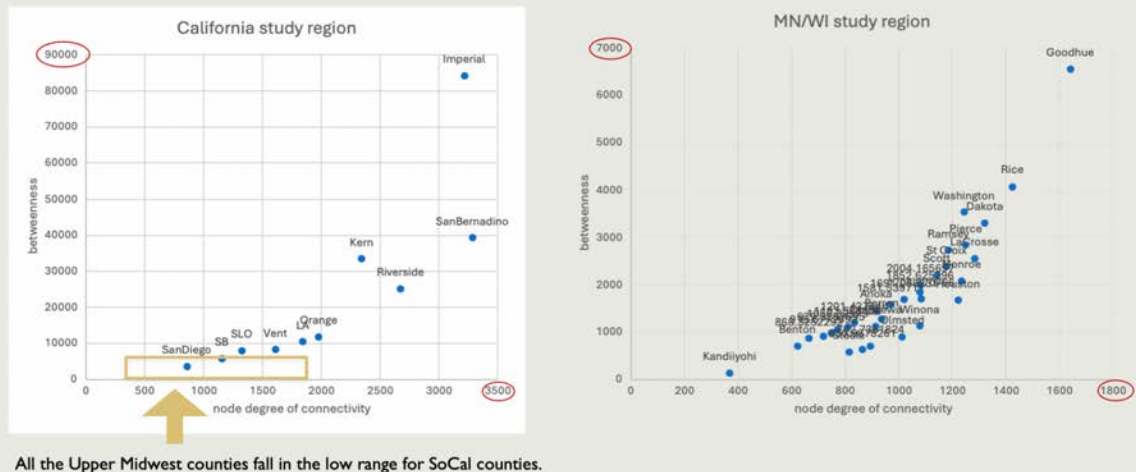


Figure 2. Comparing county centrality measures between two population regions is informative. The counties in the Los Angeles region and the Minneapolis region demonstrate the different scales that operate in dairy. Los Angeles region dairy supply chains are considerably more important to the national dairy flow than is the Minneapolist region.

Large cooperative and private processors have increased their share of total processing.²¹ Vertical integration has also been increasing in the sector, with retailers moving down the supply chain to control dairy processing, from milk production to sales, bypassing open wholesale markets. As the processor sector becomes more powerful and consolidated it can push their interest in cheap raw materials/ingredients, over the interest of the farmers, who are working to try to get a fair price that adequately covers their cost of production. Dairy overproduction leaves farmers vulnerable to low prices paid for their milk in this increasingly consolidated market. Unfettered vertical integration pushes independently owned community groceries out of business, too. Market and pricing reforms to discourage oversupply to rebalance the markets to better match supply to actual demand are needed.²² So too, is a comprehensive analysis of how this plays out in different regions across the nation.

Democratizing supply chain logistics and network planning must be readily available to independent food businesses. Information flow to improve supply chain transparency requires affordable digital tools, access to data, and rules that both protect data and ensure data portability. Information infrastructure targeted for independent businesses will reduce information asymmetry in supply chains, giving our members a fair shot at success²³. The Administration's commitment to the Freight

²¹ Gould, Brian. 2010. "Consolidation and Concentration in the U.S. Dairy Industry." Choices.

<https://www.choicesmagazine.org/magazine/article.php?article=123>

²² The farmer-led Dairy Together effort seeks implementation of a pricing policy mechanism that would send a strong signal to farmers to reduce production in low price periods. See details on the Dairy Revitalization Plan at

<https://www.dairytogether.com/resources>

²³ Miller, Michelle. "Big data, information asymmetry, and food systems". *Journal of Agriculture, Food Systems, and Community Development* (2021) <https://doi.org/10.5304/jafscd.2021.111.017>

Logistics Optimization Works (FLOW) program for the Nation’s ocean ports is an example of such a program. FLOW uses federated learning to encourage logistics collaboration. A similar information platform could be created and made available to any food distributor wishing to participate. This would improve food supply chain organization.

Interviewees in the Grassland 2.0 project were very concerned about concentration in ownership, particularly within the meat industry. They made the following policy recommendations with regards to regulations and legislation:

- **Implement legislative action on antitrust.** Increasingly, antitrust issues are addressed through the courts rather than through legislation. This is ineffective because the fines imposed through antitrust lawsuits are minimal in comparison to companies’ profits. Helpful antitrust legislation could include legislation that:
 - Prevents vertical integration, e.g., companies can no longer own the animals they slaughter or they can only slaughter one type of meat
 - Prevents companies from merging with others after they own a certain number of market shares
- **Increase the number of antitrust attorneys,** including at the state level. While judiciary action around antitrust is somewhat limited in terms of what it can accomplish, many states entirely lack this kind of judiciary capacity.
- **Increase corporate taxes**
- **Increase oversight over and transparency in checkoff programs** (e.g., the Opportunities for Fairness in Farming Act). Vertical integration has resulted in large agribusiness retailers, including foreign-owned multinational corporations, receiving checkoff money from farmers which they can use to lobby for their own interests (e.g., limiting antitrust legislation) rather than supporting the interests of US farmers or the American food system. As one interviewee shared: “...vertical integration [has] resulted in the checkoffs being a front for corporate interest. To me, it's most clear with...pork because Smithfield owns one in five hogs. It's the largest owner of hogs, therefore it gets most of the pork checkoffs. So the “voice of Americans pork farmers” is really now the acting interest of a Chinese multinational corporation.” –University researcher, Connecticut

(19) How can predatory pricing by entrenched market participants be better identified and acted upon by relevant enforcement authorities? Can laws that prohibit discriminatory or preferential pricing, such as the Packers and Stockyards Act and the Robinson-Patman Act, play a greater role in preventing predatory pricing schemes, or otherwise promote greater food market access for agricultural producers and SME processors? Please explain.

The rise of market by-pass, where vertically-integrated food companies maintain their own distribution warehouses and retails, distorts the wholesale market and gives competitive advantage to increasingly larger scale businesses. Multi-tenant markets that support independent business transactions are no longer commonly found in the US. In two decades, 1993-2014, a period marked by intensified data and information control, four companies came to control more than 55% of

grocery sales²⁴. Information services in grocery are now dominated by digital business ecosystems that crowd out independent supply chain businesses. How do we democratize digital and physical business-to-business food wholesale, to improve market structure for independent and entrepreneurial grocery?

The Robinson-Patman Act of 1914 was intended to slow the vertical integration of supply chains by slowing “wholesale by-pass”, where grocers would purchase products directly from manufacturers of shelf-stable products, and by-pass wholesale distributors. It has been more than one hundred years since this law was enacted and supply chains are organized differently than they were then. We see wholesale bypass in cold chain foods as well as shelf-stable products. Geographic concentration in fresh food production was not an issue in 1914 since it was before the time of refrigeration, interstate highways, and intensive irrigation. Geographic concentration has suppressed business opportunities for distribution companies who operate at a smaller scale and serve independent grocers. It reduces competition between distribution companies because it is more costly for them to participate in a system that relies on tight and efficient logistics to move product cross-country. It also supports vertical integration of supply chains. National and regional grocery chains serving large population centers are positioned to buy in volume and price accordingly.

Predatory pricing is a predictable market response to seasonality as experienced in different growing regions of North America. Temperate growing regions, such as the Northern Crescent, have adequate rainfall to grow many vegetables and fruits, but the growing season is shorter than the growing seasons along the fruitful rim. Government-subsidized irrigation gives regions that are naturally too dry to grow crops the means to outcompete temperate regions. Seasonality and irrigation, combined with refrigeration and efficient transportation give some regions a market advantage over regions that are limited by seasonality.

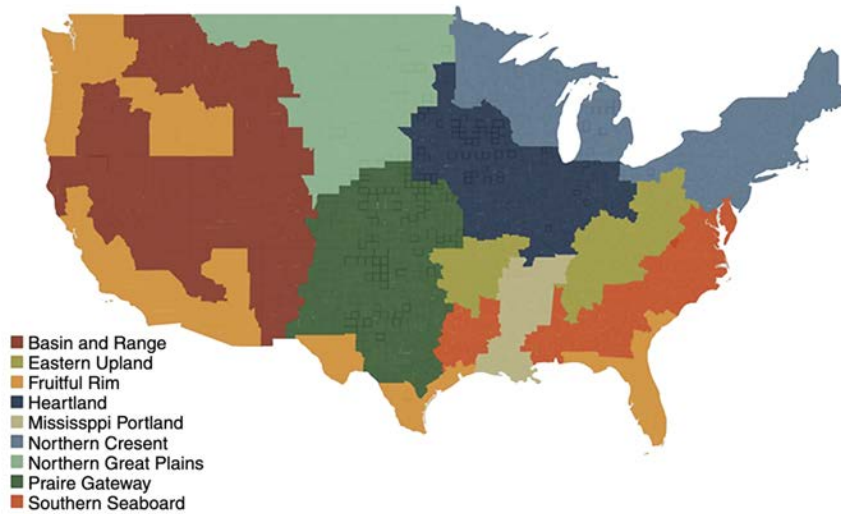
Consider the ability of warmer, irrigated regions to fill orders on the front and trailing end of the typical temperate growing season. Consumers are willing to pay more for an item when it first comes into season, and then pay more at the end of the season. Growers in temperate regions then face low prices at the height of the season. This can be alleviated to some extent by season extension in temperate regions, but not at the scale that can be achieved on irrigated lands.

It is this geographic concentration in production that now fuels “success to the successful” system imbalances that drive concentration in production, and subsequently in vertically integrated supply chains. Large producers undercut regional producers and acquire a controlling share of the market. They beat regional producers to the market with early harvests, then deflate their prices during the regional harvest, and overprice to recoup losses after the regional product is no longer available. Grocers who serve rural communities operate at a smaller scale than distributors who purchase from these large produce companies, and are unable to purchase sufficient product to access .

Geographic concentration contributes to supply chain brittleness as we witnessed during COVID19, and during periods of extreme drought, or other weather disruptions. Rebalancing food production in

²⁴ Ezeala-Harrison, Fidel, and John Baffoe-Bonnie. “Market Concentration in the Grocery Retail Industry: Application of the Basic Prisoners’ Dilemma Model.” *Advances in Management and Applied Economics*; Athens 6, no. 1 (2016): 47–67.

ERS Farm Resource Regions



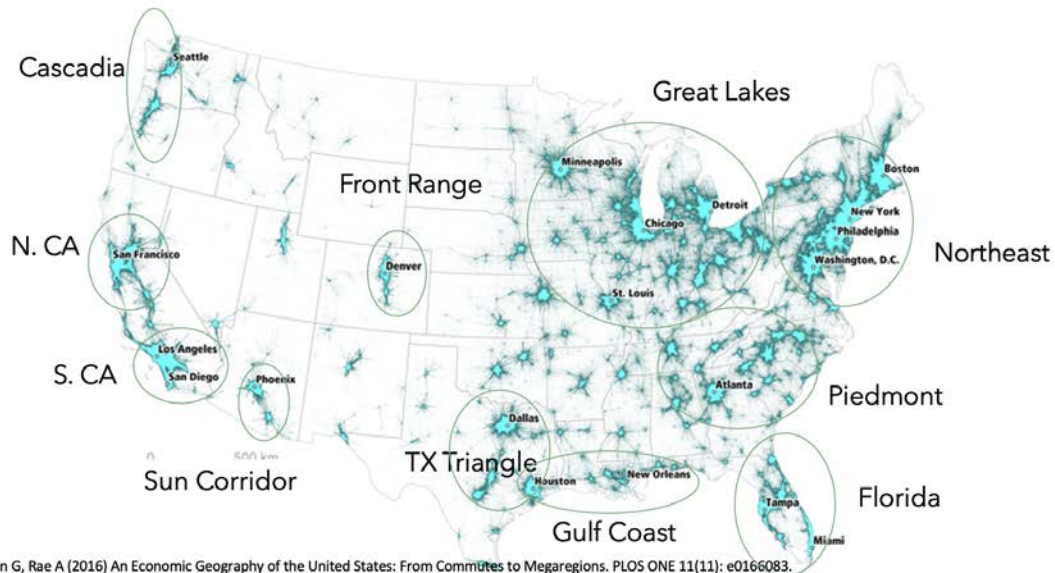
Source: USDA, Economic Research Service using Heimlich (2000).

such a way that supports regional food production and distribution to undergird our continental food flow is the fundamental challenge for North American food systems.

Figure 3. Geographic concentration of production drives predatory pricing and supply chain concentration. Consider the overlap of the Fruitful Rim with EPA-designated ecoregions (Figure 2) and urbanization patterns (Figure 3).



Figure 4. Ecoregions in North America do not coincide with current production regions, largely due to geographic concentration of production made possible by public irrigation projects. Regions naturally suitable for seasonal agricultural production experience predatory pricing from Region Ten.



Adapted from Dash Nelson G, Rae A (2016) An Economic Geography of the United States: From Commutes to Megaregions. PLOS ONE 11(11): e0166083. <https://doi.org/10.1371/journal.pone.0166083>

Figure 5. The emerging eleven megaregions would benefit from policies to strengthen regional food production as a measure to undergird the national and continental food flow from irrigated agriculture in ecoregion ten. Protecting regional food systems in regions seven, eight, nine and eleven from predatory marketing will increase food system resilience nationwide.

As our country continues to urbanize, moving food to market is increasingly difficult. A few large companies dominate wholesale food distribution. Through vertical ownership, long-term contracts, and proprietary information, they have a lock on warehousing, refrigeration, trucks, and other assets and set prices accordingly.

Limited midscale logistics infrastructure leaves most farmers beholden to large distribution wholesalers and their terms of doing business. Predatory pricing is rampant in the produce sector, where suppliers with seasonal and scale advantage control markets. The power differential is real between large wholesalers who dominate the market and smaller suppliers who have few or no alternative markets. If wholesalers don't meet contract terms or agreements, the supplier has little room to negotiate. Official protections, such as PACA, may not function as a real protection because smaller businesses may hesitate to file complaints against larger, more powerful actors, for fear of being shut out of future orders and entire markets as unofficial retribution to their complaints.

The National Grocers Association called for a check on supply chain concentration in March 2021²⁵. The grocers group contends that the Pandemic has further exacerbated market inequality and that their members — independent grocers across the United States that serve our rural communities — are disadvantaged in this hostile market environment. They provided evidence of buyer power and economic discrimination that threaten independent businesses and call for investigations and hearings, oversight, legislation, agency action and enforcement.

Research is scant on rural food logistics, as are policies to ensure that rural regions have access to the minimum infrastructure necessary for rural communities to remain tethered to supply chains that

²⁵ National Grocers Association. "Buyer Power and Economic Discrimination in the Grocery Aisle: Kitchen Table Issues for American Consumers." National Grocers Association, March 2021. <https://www.nationalgrocers.org/antitrust/>.

serve urban regions. Because rural stores receive and sell produce with a low frequency, distributors must move less than a full truckload or make multiple stops. Both of these options increase the cost of moving refrigerated products, which is passed down to the rural consumer. Deliveries are infrequent, so produce quality varies. Coordinating and optimizing rural food logistics is critical for independent stores to thrive²⁶.

National and large regional grocery chains invest in distribution centers to improve logistical capacity for their proprietary supply chains. Independent regional distributors need access to similar warehousing especially for cold chain deliveries so that they may reduce transportation costs. In other countries, these multi-tenant warehouses are recognized a critical public infrastructure²⁷.

Early findings on produce wholesale distribution document the impact of insufficient wholesale competition in one rural study region. Using 2019 TransSearch data on freight movements into Wisconsin, produce per capita in remote rural counties is at the very low end of the spectrum resulting in low food access. Interviews with retailers and distributors indicate that too few businesses provide wholesale distribution for this region resulting in non-competitive markets.

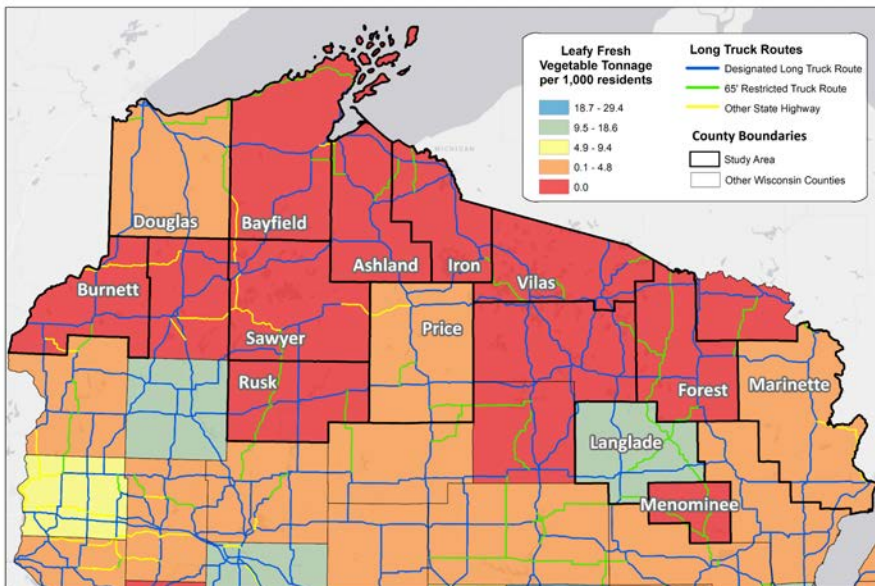


Figure 6. 2019 leafy fresh vegetable tonnage per 1000 residents in Northern Wisconsin. Interviews indicate a seasonal swing in availability. Wholesale produce trade increases dramatically during peak summer tourism season.

(20) How could other USDA programs, services, and authorities be further deployed to enhance access to retail markets for agricultural producers and SME food processors? How might grants, loans, and other support from USDA enhance access to retail markets by local and regional food enterprises? How might food and nutrition grant and loan programs better support competition in

²⁶ Evangelista, Pietro, Bettina Williger, Girma Gebresenbet, and Serena Micheletti. “Managing Logistics and Supply Chain in Rural Areas: A Systematic Analysis of the Literature and Future Directions.” In *New Metropolitan Perspectives*, edited by Carmelina Bevilacqua, Francesco Calabrò, and Lucia Della Spina, 157–66. Cham: Springer International Publishing, 2021.

²⁷ Miller, Michelle. “Identifying Critical Thresholds for Resilient Regional Food Flows: A Case Study from the U.S. Upper Midwest.” *Frontiers in Sustainable Food Systems* 5 (2021): 371. <https://doi.org/10.3389/fsufs.2021.684159>

retail and better access for producers and SME processors? How might government procurement processes further support agricultural producers and SME processors effectively access institutional customers, such as schools and hospitals? ^[7]

There are two things to consider when developing programs to improve competition in wholesale distribution. First, retail and institutional food service use two distinct distribution pathways. This means that work to improve farm-to-institution distribution may not address needs for wholesale food distribution serving grocery stores. Ensuring separate programs for these two streams is necessary. For example, product aggregation to reach scale is necessary for both, and yet will require a different set of specifications and relationships for these different markets.

Second, work that bolsters charitable supply chains may not improve wholesale distribution for grocery retail, and in some cases may compete with retail. Supporting SMEs builds community wealth overall. Because charity food programs rely on volunteers and donations, they don't have comparable economic development benefits to the communities where they operate.

Adding small cold storage facilities for the sole benefit of charitable food distribution does not improve food access for all. If these facilities were open to any business or nonprofit, they would make a greater impact on the system overall. Although charitable food supply chains deserve support, it may be more equitable to support collaboration between businesses and food banks and pantries. For instance, our interviews indicate that some charitable food organizations are working with local groceries to supply pantries, rather than creating separate supply chains. This increases order volume for the grocery store, lowering food prices for the entire community.

What additional information or transparency could USDA's Market News Service provide on retail, wholesale, or distribution markets, through the Livestock Mandatory Reporting Act of 1999 or otherwise? ^[9] Are there information or educational tools, services, or access to data that could be helpful? What additional market analysis or advocacy could USDA do with respect to local and regional food systems, transportation, or otherwise that could support fair and competitive food retail and distribution markets? ^[10]

Geographic market network analysis at the regional level is necessary to assess the strength of any given region to undergird the national production and distribution network. This analysis could be especially useful for regions, states and cities to plan targeted public investment in food systems resilience. USDA-AMS could provide such analysis on a five-year basis, coinciding with the release of Commodity Flow Survey data. This would assist federal agencies and policy makers in monitoring progress and targeting public investment in moderating market concentration.

Interviewees in the Grassland 2.0 project expressed a great deal of interest in cooperative models of processing, marketing, and farming – something that the USDA could develop more programs to support. Some interviewees talked about this specifically as a way to give farmers more control over their supply chains, as a means of helping beginning and underserved farmers enter farming, and as a way to create better conditions for workers in processing plants. Several Tribal members were interested in opening their own processing plants to help build Tribal food security and sovereignty, both having greater access to a resilient and sustainable food supply and reclaiming control of their own food production on their own terms. However, one interviewee also mentioned how cooperatives, like many dairy co-ops, can become subject to corporate capture or get so large that

they limit the power of farmers to have a say in their markets rather than expanding it. He recommended updating the legal frameworks for cooperatives to ensure new cooperatives aren't subject to corporate capture as in the dairy industry.

“We don't have to deal with any of the logistics of processing...being in a co-op means there's a centralized team who deals with all that, so that we just have to grow chickens... Yeah, I think, that is the most tangible benefit since it just makes us able to run the business on the production side, and it's phenomenal.” –Beginning chicken farmer and member of a farming and marketing cooperative, Minnesota

“We're pretty seasonal in our meat prep availability and trying to figure out how we can manage continuing to farm like we do, but then still try to have product more year-round. I think if there's ways that we can...collaborate (with other farmers) on meeting customer needs, that could be helpful. Or even...the Grass-fed Beef Cooperative in Wisconsin, they expanded to pork, but is there opportunity to even expand to other proteins?” –Goat farmer, Wisconsin

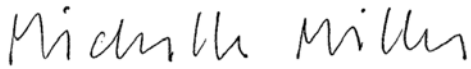
Conclusion

Geographic and enterprise ownership concentration distort and suppress market signals necessary for healthy competitive markets and agricultural and food policies. This has limited farmers choices and made it more difficult for small and midsized farmers and SME processors to stay in business. It has also allowed companies to lobby for policies that externalize many of their costs (in terms of environmental damage, low wages, and healthcare costs due to labor abuses and subsidies for highly processed foods) onto taxpayers, increasing their bottom line at the expense of the public.

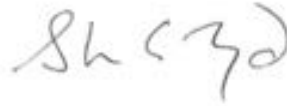
There is a need to address market consolidation through antitrust and other regulations, and to supplement national analysis with regional analysis to consider region-specific differences in market structure and agroecological production. Regulations, policies and support programs could be refined to reflect regional and scale differences in such a way that would encourage entrepreneurship without sacrificing food safety. This would improve resilience at the regional level and stimulate rural development.

Sincerely,

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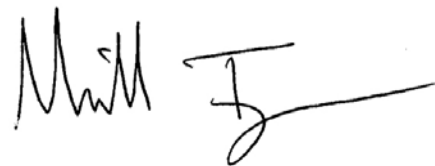
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