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SUBMITTED TO THE U.S. SENATE COMMITTEE ON THE JUDICIARY REGARDING CONSOLIDATION AND COMPETITION IN THE U.S. SEED AND AGROCHEMICAL INDUSTRY

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1. Overview

Thank you for the opportunity to testify and for the important work of this committee examining consolidation in agriculture, particularly in the U.S. seed and agrichemical industry. National Farmers Union (NFU) represents about 200,000 family farmers. NFU was organized in Point, Texas in 1902 with the mission of improving the wellbeing and economic opportunity for family farmers, ranchers, and rural communities through grassroots-driven advocacy. That mission still drives NFU's work today. As a general farm organization, NFU represents agricultural producers across the country and in all segments of agriculture.

NFU, as directed by its member driven policy established at its annual convention, advocates for competitive markets that allow family farmers to succeed.¹ In pursuit of these goals, NFU has routinely weighed in with legislators and antitrust regulators on consolidation in both the agricultural inputs sector as well as the agricultural processing sector. Inadequate market competition is one of the most pressing issues facing producers across the country.

NFU has been concerned over the long-term trends of consolidation in the agricultural inputs sector. The current third wave of consolidation with the announced mergers of Dow and DuPont; Bayer and Monsanto; and ChemChina and Syngenta results in an unacceptable level of concentration. With the downturn of the agricultural economy, the entire agriculture sector is engaged in rapid consolidation. DowDuPont, Bayer-Monsanto, and Chemchina-Syngenta would have more than 80% market share of the U.S. corn seed sales and 70% of the global pesticide market.² These mergers will result in fewer choices for farmers, higher prices, and less innovation. I strongly encourage Congress to continue to examine consolidation and its impacts. In addition, consolidation resulting in a few firms with substantial market share of a sector, using indices such as Herfindahl-Hirschman Index (HHI) or Concentration Ratios (CR4), should be prevented by law.

2. Legal Framework

The need for greater competition oversight today is informed by the history of competition legislation and enforcement in the U.S. The 1890 Sherman Act,³ the first federal antitrust law, protected consumers by barring businesses from taking actions to preserve existing monopolies and entering into agreements that stifle competition. The Sherman Act allows the government to block both actions and results that unfairly limit competition.

In time, many businesses found new ways to circumvent competition. Mergers became increasingly popular as a means to achieve the same goals as establishing trusts without violating the Sherman Act. Demonstrating that the innovation of anticompetitive forces must be matched by progressive regulation in order to secure the same level of consumer protection, Congress passed the Clayton Antitrust Act⁴ in 1914 to bar the following specific actions if they limit competition:

• Price discrimination among producers,

¹ "2016 NFU Policy." *National Farmers Union*. N.p., 12 May 2016. Web. 19 Sept. 2016. http://nfu.org/2016-nfu-policy.

² Steele, Anne. "Bayer's Deal for Monsanto – At A Glance." *Wall Street Journal*. N.p., 14 Sept. 2016. Web. 19 Sept. 2016. Available at http://blogs.wsj.com/briefly/2016/09/14/bayers-deal-for-monsanto-at-a-glance/

³ 15 U.S.C. § 1-7.

⁴ 15 U.S.C. § 12-27, 29 U.S.C. §§ 52-53.

- Exclusive dealing agreements,
- Tying arrangements, and
- Mergers and acquisitions.

In 1936, Congress added price discrimination against "equally-situated distributors" to the list of actions that are prohibited when they suppress competition with The Robinson-Patman Act.⁵

In 1950, Congress amended the Clayton Antitrust Act to strengthen it and plug loopholes, motivated by desire to protect local economic controls and small businesses and move the opportunity for government intervention to earlier phases of rising anticompetitive trends. Judicial interpretation of these amendments in *Brown Shoe Co. v. United States*⁶ also clarified that federal intervention was appropriate when harm to competition is probable, as opposed to certain. That case also established the relevance of the structure, history and likely trajectory of the industry in question as to how mergers are assessed, an especially salient point today.

The long-held and strong value placed on vigorous protection of consumers against monopolistic tendencies is also evidenced by Congress' creation of an agency specifically dedicated to investigating and blocking anticompetitive behavior in the Federal Trade Commission Act of 1914.⁷ Preserving competitive markets was deemed too important to be left solely to one section of the Department of Justice; the new agency would focus solely on consumer protection and blocking anticompetitive actions.

In the past few decades, though, federal enforcement actions have waned, especially where companies proposing mergers can demonstrate that larger, combined businesses can offer lower prices. But when competition is limited, there are no long-term safeguards against future consumer price hikes.

What enforcement does take place has been more focused on horizontal restraints than other more varied types of anticompetitive activity. This hands-off approach to antitrust enforcement has led to the highly consolidated economic conditions prevalent today, the resulting vulnerability of American farmers, and a food system in need of more resilience. But despite assurances to the contrary, prices farmers pay for inputs have risen as mergers among input providers accelerated. And anemic enforcement focused on prices does not account for other important values pursued through competitive markets like innovation and entrepreneurship.

As recently as the 1970's, there was significant competition in the seed market. Within that market there were thirty separate companies that became the big six we are familiar with today. These players make up more than 60 percent of the global seed market and 76 percent of the global agricultural chemical market. The top three own 85 percent of the corn patents and 70 percent of the non-corn patents.⁸

Institutional economists suggest that when four firms control 40 to 50 percent of the market it is no longer competitive, since a company could signal that it intended to increase prices and the other companies have incentives to follow suit.

⁵ 15 U.S.C. § 13.

⁶ 370 U.S. 294 (1962).

⁷ 15 USC §§ 41-58.

⁸ Howard, Philip H. "Intellectual property and consolidation in the seed industry." *Crop Science* 55.6 (2015): 2489-2495. Available at

http://www.apbrebes.org/files/seeds/files/Howard_seed_industry_patents_concentration_2015.pdf

It is also easier to fix prices when there are fewer market participants. In the biotech seed space, accusations of this have spilled out in the open, most notably between DuPont and Monsanto during the late 1990's. From 1996 to 2013 the top ten seed companies purchased roughly 200 seed companies and bought equity stakes in dozens of other seed companies.

In this space legal disputes, whether related to price or control, are often resolved through either technology sharing agreements or the purchase of smaller firms.

Dominant firms are reducing the availability of non-transgenic varieties and increasing the price of the remaining non-transgenic varieties to discourage the use of those varieties. In Illinois, a survey found that 40 percent of farmers did not have access to any non-transgenic high yielding seed corn.⁹

One of the arguments frequently made in support of consolidation in the agricultural technology sector is that larger firms will have *greater* capacity to innovate because they have the capital resources to endure the regulatory process. While we reject the premise that fewer firms will result in greater innovation, we do acknowledge that the regulatory environment in the U.S. is costly and can be prohibitive for smaller firms to compete. The unpredictable and lengthy regulatory review process, particularly in the biotechnology space, encourages greater consolidation in the sector. Regulators need stable funding, professional discretion, and insulation from politics in order to review these products safely, efficiently, and in a timely manner.

3. Dow and DuPont

The merger between the Dow Chemical Company (Dow) and E. I. du Pont de Nemours and Company (DuPont) started the third wave of consolidation in the agricultural biotechnology, seed, and chemicals sector. Preceded by two major waves in the mid-1980s and again in the late 1990s to late 2000s, this merger combines two of the "Big 6" firms.

A combined DuPont and Dow would have a market share of 41% and 38% in corn and soybean seeds, respectively.¹⁰ In 2014, the ranking of the Big 6 in total global agriculture-related revenue was: Monsanto (\$16 billion), Syngenta (\$14 billion), Bayer (\$12 billion), DuPont (\$11 billion), Dow (\$7 billion) and BASF (\$7 billion).¹¹ The proposed merger of Dow and DuPont would combine the 4th and 5th largest rivals, creating a firm that would surpass Monsanto as the current leader.¹² It is also important to note that the prospective merger of Monsanto and Bayer would combine the 1st and 3rd largest firms. The two mergers together would therefore create a Big 4, dominated by a Monsanto-Bayer and Dow-DuPont duopoly.

⁹ Howard, Philip H. "Intellectual property and consolidation in the seed industry." *Crop Science* 55.6 (2015): 2489-2495. Available at

http://www.apbrebes.org/files/seeds/files/Howard_seed_industry_patents_concentration_2015.pdf ¹⁰ "Dissecting Dow and DuPont Deal: Concern over Concentration." *Forbes*. Forbes Magazine, 15 Sept. 2016. Web. 19 Sept. 2016. Available at http://www.forbes.com/sites/greatspeculations/2016/09/15/dissecting-dow-anddupont-deal-concern-over-concentration/#2b7ea91662f2

¹¹ DuPont and Dow to Combine in Merger of Equals, (Dec. 15, 2015), at 8. Presentation can be found at http://www.dow.com/en-us/investor-relations/investor-presentations.

¹² Mulvany, Lydia, Sara Forden, and Patrick Gower. "Dow-DuPont Merger Likely to Face Antitrust Scrutiny Worldwide." *Bloomberg.com*. Bloomberg, 11 Dec. 2015. Web. 19 Sept. 2016. Available at

http://www.bloomberg.com/news/articles/2015-12-11/dow-dupont-merger-likely-to-face-antitrust-scrutinyworldwide; see also Jacob Bunge and Brent Kendall, Merger of Dow, DuPont Likely to Get Close Antitrust Scrutiny (Dec. 9, 2015), http://www.wsj.com/articles/merger-of-dow-dupont-likely-to-get-close-antitrust-scrutiny-1449709088.

In a letter to the Department of Justice, NFU, Food & Water Watch and the American Antitrust Institute outlined the competition concerns relative to the merger of Dow and DuPont. The proposed merger of Dow and DuPont is likely to adversely affect competition in three ways. First, it will eliminate head-to-head competition in markets for crop seed and chemicals. Second, the proposed merger will eliminate head-to-head competition in agricultural biotechnology innovation markets and reduce opportunities for pro-competitive research and development (R&D) collaborations. Third, the merger would create substantial vertical integration between traits, seeds and chemicals. The resulting "platform" could be potentially engineered for the purpose of creating exclusive packages of traits, seeds and chemicals that do not "interoperate" with rival products. This will likely raise entry barriers for smaller rivals and increase the risk that they are foreclosed from access to technology and other resources needed to compete effectively.¹³

We often discuss these mergers in broader strokes, contending that a lack of competition will negatively impact farmers. A venue, such as this hearing, provides an opportunity to discuss this topic in more specific terms. I come from a multigenerational farming background. Such a background provides me the opportunity to look at farm profitability over the years and contrast it against varying levels of choice in the marketplace.

Using my farm in Turtle Lake, North Dakota, as an example, the choices available to me for certain crops are limited and poised to be even fewer after this massive wave of consolidation. Today's Dow Agroscience and DuPont Pioneer websites provide potential customers the opportunity to review the products and its associated information online. In many cases, the choice of seed is extensive. DuPont has more than 300 unique corn seed products. Earlier this year, Dow had 336 corn seed products and today, according to their website, they have 330. Though there may be many similarities between the different traits within separate product lines, on the surface, the numbers show there is a lot of variety. While there is indeed variety, it's important to keep in mind that all trait choices are not available to all producers in all areas.

As an example, DuPont's corn trait for farmers in Johnston, Iowa number 61 different choices, while in Turtle Lake it's 29. In any potential merger scenario, there are a number of situations that this committee should weigh. Does Dow DuPont keep the over 600 traits and if so, how does that market force allow them to foreclose new entrants from a hyper consolidated seed market? Additionally, if the companies divest product lines, how does that impact producers who are left with fewer trait options? With corn, I'm worried about the first scenario. Innovation by new entrants and the associated competition that comes with that is critical in advancing technologies for the benefit of producers.

The second scenario is of less concern as it relates to corn trait selection in Turtle Lake. While there may be substantial choice for farmers in this area for corn, canola brings more challenges. Availability of canola traits in Turtle Lake offers an important picture of what further consolidation could bring. At this time, Dow offers 5 canola traits, DuPont offers 3 traits. A reduction of one or two traits represents a significant change in what producers have available to grow. This scenario could also extend to other small grains that northern producers have traditionally relied upon for crop rotations and diversity of production to mitigate risk.

4. Bayer and Monsanto

¹³ American Antitrust Institute, Food & Water Watch, and National Farmers Union. "The Proposed Dow-DuPont Merger." Letter to Renata Hesse, Principal Deputy Assistant Attorney General, U.S. Dept. of Justice. 31 May 2016. Available at http://nfu.org/wp-content/uploads/2016/05/Joint_Dow-Dupont_5.31.16.pdf.

The issue of choice also comes into play when examining the recently announced acquisition of Monsanto by Bayer. Monsanto has 21 brands related to seeds and traits.¹⁴ Bayer has fewer traits and seed lines with a total of 7.¹⁵ In this case, Bayer is much more invested in crop protection than seed. On its surface, one could contend that this acquisition will align to provide producers integrated solutions for planting. However, there is significant overlap between the two portfolios and the merger will result in fewer choices available to farmers and higher prices.

Cotton provides an important example. FiberMax and Stoneville are the two cotton brands in Bayer's portfolio. Deltapine is Monsanto's flagship cotton brand. As part of the acquisition of Deltapine by Monsanto in 2006 the Department of Justice required that Monsanto divest Stoneville. The DOJ order recognized that the combined company would dominate the traited cottonseed market in the United States, with nearly 95 percent of all cottonseed sales in the high-value cotton-growing regions of the MidSouth.¹⁶ Today, we are standing in front of a proposal that would join the two cotton brands back together and further widen it through the additional brand FiberMax. This would certainly be to the detriment of cotton farmers across the south.

Cotton overlap is not the sole concern. As I mentioned earlier, canola is an important crop in my area. Monsanto has two canola varieties under its Genuity brand, one for spring and one for winter canola. Bayer also has a single product line under the InVigor brand that has 7 varieties. Reductions in either brand would be a significant reduction in choice. But underscoring the lack of choice is also the lack of diversity. Between Dow-DuPont and Bayer-Monsanto, major canola varieties will only be sold by two companies if the mergers are allowed to move forward. Neither BASF nor Syngenta, the other two major players, sell canola. In essence, we would have a duopoly in canola seed sales.

Cross-licensing agreements are another issue to pay close attention to, especially with the merger of Monsanto and Bayer. Monsanto and Bayer are equally, if not more so, effective in leveraging crosslicensing arrangements. As an example, one needs to look no further than Liberty Link or Roundup Ready. Both of these products have made their way into a wide variety of seeds far beyond the offerings of Monsanto and Bayer product lines. Liberty Link traits can be found in Dow's Herculex, Monsanto's SmartStax, Syngenta's Agrisure, and DuPont's Optimum. Though different, Roundup Ready traits have an almost universal presence in transgenic seeds produced by Monsanto's competitors. Cross-licensing is extremely prevalent in the industry and can allow for cartel-style behavior. It raises the bar for new entrants because in addition to the substantial research and development resources required to bring a product online, new entrants would also need to pay the existing market participants in order to license existing traits.

5. ChemChina and Syngenta

At the time it was announced, the ChemChina acquisition of Syngenta would have created the world's largest manufacturer and distributor of agrichemicals and pesticides (the announcement of Bayer and Monsanto's merger would eclipse ChemChina-Syngenta). In addition, it is the largest Chinese purchase

¹⁴ "Products." *Monsanto Brands*. Monsanto, n.d. Web. 19 Sept. 2016.

http://www.monsanto.com/products/pages/monsanto-product-brands.aspx>.

¹⁵ "Home." *Bayer Seed Varieties & Hybrids*. Bayer Crop Science, n.d. Web. 19 Sept. 2016.

<https://www.cropscience.bayer.us/products/seeds#>.

¹⁶ Dept. of Justice. Antiturst. *Justice Department Requires Divestitures in \$1.5 Billion Merger of Monsanto and Delta & Pine Land Justice.gov.* N.p., 31 May 2007. Web. 19 Sept. 2016.

<https://www.justice.gov/archive/atr/public/press_releases/2007/223676.htm>.

of any foreign firm in history.¹⁷ Syngenta is the world's largest crop protection company, with 21 percent of the global market in crop protection chemicals.¹⁸ Syngenta is also a major seller of seeds in the U.S., with 10 percent market share of soybean seeds, and 6 percent of corn seeds. ChemChina is a Chinese state-owned chemical company and is the largest manufacturer of non-patented pesticides in the world.

In a letter to the Committee on Foreign Investment in the United States (CFIUS) in July of this year, NFU and Food & Water Watch outlined several concerns regarding the acquisition of Syngenta AG (Syngenta) by China National Chemical Corporation (ChemChina). Those concerns included potential impacts on national security, the transfer of critical technology, exacerbation of consolidation in agriculture inputs, and the potential for state interference in global trade.

This merger results in Chinese government control of one of the largest agrichemical and seed companies. ChemChina's president will chair Syngenta's board of directors and the majority of the board members would come from ChemChina. This means the Chinese government will have control over Syngenta's research labs and production plants. As we pointed out in our letter, many of these facilities are located in close proximity to U.S. military assets. Despite the substantial concerns conveyed to CFUIS, the Committee ultimately approved the merger.

The ChemChina-Syngenta deal will allow ChemChina to exert anticompetitive pressure on the seed and agrichemical market, increase prices that farmers pay for seeds and other inputs, and undermine the economic viability of family farms. China will have the power to favor Syngenta's business interests in the regulatory framework. Further, the industry trend has moved towards integrated platforms of complementary seeds, traits, and chemicals. Should ChemChina wish to use Syngenta's products in an integrated platform and influence market power, it could foreclose the opportunity for Syngenta to cross-license seed patents for stacked seed traits offered by other seed companies. Or ChemChina might simply be able to fast track all of its products in the Chinese marketplace and "slow-track" approvals of rival products, severely constraining open trade.

The ChemChina-Syngenta merger raises additional concerns about the future of litigation with Syngenta. Hundreds of farmers have entered into litigation regarding Syngenta's sales of the Agrisure Viptera MIR162 trait in corn seeds that was, at the time, unapproved by the Chinese regulatory authorities. As a result, China rejected corn shipments and, according to the filings, resulted in more than \$1 billion in losses for U.S. farmers.¹⁹ Given ChemChina's status as a state-owned entity, the company may be able to successfully argue exemptions under the Foreign Sovereign Immunities Act (FSIA).

FSIA outlines all of the exceptions to the general immunity that foreign states are granted in the jurisdiction of U.S. courts. FSIA provides that foreign states are immune from jurisdiction for public acts, but commercial activities fall under jurisdiction. Some Chinese companies have argued that, as state-owned entities, they have protection under FSIA.²⁰ This use of FSIA to protect wholly commercial activities from falling under the jurisdiction of U.S. courts creates a whole litany of issues – including

¹⁷ Held, Robert. "To buy a Swiss company, ChemChina must pass through Washington." *The Hill*. February 19, 2016; Scissors, Derek. "After Syngenta, what's next for China Inc.?" *Barrons*. February 23, 2016.

¹⁸ Bunge, Jacob and Brent Kendall. "Merger of Dow, DuPont likely to get close antitrust scrutiny." *Wall Street Journal*. December 9, 2015

¹⁹ Bunge, Jacob. "Syngenta Faces More Suits Over Viptera Corn Seeds." WSJ. Wsj.com, 19 Oct. 2014. Web. 19 Sept. 2016. http://www.wsj.com/articles/syngenta-faces-more-suits-over-viptera-corn-seeds-1413743258>.

²⁰ Miller, Matthew, and Michael Martina. "Chinese State Entities Argue They Have 'sovereign Immunity' in U.S. Courts."*Reuters*. Thomson Reuters, 11 May 2016. Web. 19 Sept. 2016. http://www.reuters.com/article/us-china-usa-companies-lawsuits-idUSKCN0Y2131.

creating an unfair advantage for state-owned companies.

Another issue that arises with regard to the commercial activity exemption under FSIA is the increasingly opaque corporate structures which challenge the courts to determine whether exemptions under FSIA apply. NFU appreciates Chairman Grassley's leadership on this issue with his introduction of the State-owned entities Transparency and Accountability Reform (STAR) Act. This legislation would extend the jurisdiction for U.S. courts to state-owned corporate affiliates of foreign-owned companies for their commercial activities. This is a commonsense modernization of FSIA.

The Viptera lawsuit creates a very palpable example of a case that may not be able to proceed due to the change in ownership.

6. Mergers in the face of a faltering farm economy

The announcement of all of the seed and agrochemical companies comes in the midst of a struggling farm economy. As I testified in front of the House Agriculture Committee earlier this year, producers across the board are challenged by low commodity prices, high inputs costs, and significant tests to the safety net. Net cash farm income for 2016 is forecast at \$94.1 billion, down 13.3% from 2015 estimates. Farm debt is projected to be more than \$372 billion this year, which when adjusted for inflation, is the highest farm debt since the late 1970s.²¹

Unfortunately, when firms talk about the synergies to be gained from merging, it often means layoffs. Oftentimes, those eliminated jobs are in rural areas, so when companies merge, farmers and their communities bear the brunt on both ends of the spectrum – loss of good jobs in their communities and higher input costs. Monsanto has already announced plans to cut 3,600 jobs globally, Dow has announced the elimination of 2,500 jobs, and DuPont has announced the elimination of 1,700 jobs in Delaware.

While the agrichemical and seed companies are feeling strained in boardrooms and being pressured to merge, no one feels the strain of a farm economy more than the farmers. For them, it is not just their farm business on the line, but also their homes and their entire way of life. The increase in consolidation has farmers concerned about the inevitable increase in costs that comes with it.

The issue of cost is something farmers focus a great deal of energy on. The costs of inputs over the last decade have continued to increase. I will not contend that producers have not seen additional benefits with this increase in cost. The technology has certainly advanced as yields have improved and crops have gotten healthier. However, I will contend that despite these advancements significantly more financial benefit has flowed to manufacturers than to producers.

In the last 10-12 years input cost increases have been significant. To demonstrate this point I would draw your attention to crop budgets compiled by North Dakota State University. These impartial documents allow us to explore cost without interjecting any additional agendas. The 2004 crop budget was used as a starting point because it is still publicly available. The crop budgets are broken down by region. Since Turtle Lake is in the North Central part of the state, I will use examples from those crop budgets.

²¹ Gerlock, Grant. "With Economy Stuck In The Mud, Farmers Sink Deeper Into Debt." *The Salt*. NPR, 3 Mar. 2016. Web. 19 Sept. 2016. http://www.npr.org/sections/thesalt/2016/03/03/468887506/with-economy-stuck-in-the-mud-farmers-sink-deeper-into-debt.

As a simple price contrast, take this into consideration, fertilizer prices in 2004 were as follows: Nitrogen- \$.23/lb, Phosphorus-\$.22/lb, and Potassium-\$.13/lb. In 2016 the same fertilizer cost: Nitrogen-\$.40lb, Phosphorous-\$.44/lb, and Potassium-\$.33/lb. In other words, prices have essentiallydoubled.

Seeds also account for significant cost increases for producers from 2004 to 2016. In 2004, spring wheat cost \$5.75 a bushel, Roundup Ready corn grain was \$1.34 for 1000 kernels, canola was \$3.00 a pound, and winter wheat was \$4.75 a bushel. Today those same seeds cost \$9.25 a bushel for spring wheat, \$2.70 per thousand kernels for genetically engineered corn, \$10.25 a pound for canola, and \$8.00 a bushel for winter wheat (These seeds were picked at random, I invite anyone concerned about the seeds chosen to explore the crop budgets and the built in costs themselves). Like other input costs, seeds have doubled or nearly doubled in our sampling of seed costs.

While input costs increased, so too did yields for a range of commodities. As I previously stated, I will not contend that producers have not benefited from advanced technologies. However, by examining net farm profitability we can better understand if the cost increases are truly justified. The crop budgets from NDSU allow us to do just that. To look at profitability, one must sum the direct and indirect costs and subtract them from a farmer's income or yield times price.

Using 2004 numbers, a farmer who planted spring wheat experienced a return on labor and management of \$-17.64 an acre. In 2016 the estimate was \$-14.07 an acre. But the 2016 estimates for spring wheat assume a farmer can sell his spring wheat at \$5.26 a bushel in North Dakota. That price is very optimistic. The current spring wheat price (13 percent protein) in North Dakota is \$3.83 a bushel. If we substitute in the actual price of wheat and recalculate income the producer would lose \$-76.99 an acre. At the same time the farmer's direct costs have increased from \$55.17 in 2004 to \$153.23 in 2016. This clearly demonstrates that cost increases have not led to increases in overall farm profitability.

7. Other agricultural consolidation

The massive consolidation occurring in the agricultural chemical and seeds sector is only part of the story. I would encourage the Committee to also examine other consolidation in agriculture and its impacts on farmers and the rural economy. From crop inputs to technology to processors and retailers, the food system is mired in consolidation.

For example, Potash Corporation and Agrium have recently agreed to merge, creating the world's largest crop nutrient supplier with an estimated value of \$27 billion.²² U.S. and Canadian farmers already pay more than 30 percent more for muriate of potash than their international counterparts.²³ Already, there is evidence that fertilizer producers have coordinated to raise prices, ultimately impacting consumers and farmers.²⁴

²² Skerritt, Jen, and Simon Casey. "Potash Corp. and Agrium to Merge, Creating Fertilizer Giant." *Bloomberg.com*. Bloomberg, 12 Sept. 2016. Web. 19 Sept. 2016. http://www.bloomberg.com/news/articles/2016-09-12/agrium-potash-corp-to-combine-in-fertilizer-merger-of-equals.

 ²³ Taylor, C. Robert, and Diana Moss L. *The Fertilizer Oligopoly: The Case for Global Antitrust Enforcement*. Tech.
Washington, DC: American Antitrust Institute, 2013. <

http://www.antitrustinstitute.org/sites/default/files/FertilizerMonograph.pdf>

²⁴ Taylor, C. Robert, and Diana Moss L. *The Fertilizer Oligopoly: The Case for Global Antitrust Enforcement*. Tech. Washington, DC: American Antitrust Institute, 2013.

<http://www.antitrustinstitute.org/sites/default/files/FertilizerMonograph.pdf>

NFU was pleased to see DOJ sue to block Deere & Company (John Deere) from acquiring Precision Planting LLC from Monsanto Company because of competition concerns. High-speed precision planting technology has been a welcome tool for farmers to increase yields. The merger of these two companies would eliminate head-to-head competition and lead to higher prices, less innovation and fewer choices.

At the other end of the supply chain, NFU has brought attention to the lack of competition in the meat packing industry. The top four meat processing companies slaughter 85 percent of cattle, 74 percent of hogs, and 54 percent of chicken. Farmers have limited choices for processing livestock and, as a result, are often at the mercy of the companies. Most recently, NFU weighed in with DOJ on acquisition of Cargill's pork operations by JBS. Like many meatpacking mergers before it, this faced no challenges from regulators. Farmers and ranchers bear the brunt of consolidation across the supply chain.

8. Next steps

I appreciate the opportunity to testify on this matter, which is of critical concern to NFU. Clearly, the nation's antitrust enforcement has failed farmers and consumers. NFU has several recommendations for the Committee to consider. NFU recommends greater Congressional oversight of food system antitrust matters through hearings and listening sessions. In addition, Congress should prevent consolidation that results in a few firms controlling a substantial portion of market share of a sector. In the case of foreign investment in the U.S., additional legislation is required to clarify exemptions from FSIA in the instance of commercial activities in order to level the playing field.

A robust agricultural economy is key to a stable and secure nation. Increased consolidation in the sector puts family farmers and their communities in jeopardy.

Thank you for the opportunity to testify. I look forward to answering any questions.