MONSANTO AND MERGERS: HOW ANTITRUST GOT BORKED AND HOW COURTS CAN TAKE IT BACK

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If we will not endure a king as a political power, we should not endure a king over the production, transportation, and sale of any of the necessities of life. If we would not submit to an emperor, we should not submit to an autocrat of trade, with power to prevent competition and to fix the price of any commodity.[1]
-Senator John Sherman

I. INTRODUCTION

Americans in both the Tea Party and Occupy Wall Street movements marched in the streets against the bailouts of banks and automakers during the Great Recession. Americans rallied against the notion that companies were becoming "too big to fail." The government took only minor actions to prevent these market failures from occurring once more. Little prevented the "too big to fail" financial institutions from continuing to grow their market shares.[2] Regulation did little to prevent the big banks from getting bigger.[3] This increase in

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1. Lina M. Khan, Note, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 740 (2017).

2. Philip Bump, *Bernie Sanders is right: The biggest banks in America have gotten bigger*, WASH. POST: THE FIX (Feb. 12, 2016), https://perma.cc/2NV6-HDQR.

3. *Id.*

consolidation is not limited to financial institutions and automakers. Agribusiness is dominated by only a handful of large, global firms.[4] Of the "Big Six" agricultural chemical companies, only one has not or is not planning to merge with another company; four of the six largest companies—Dow Chemical, DuPont, Bayer, and Monsanto—have either merged or are planning to merge with one another while the other, Syngenta, plans to merge with another large company in a similar industry.[5] The government implemented additional regulation on financial institutions after the crash; the government failed to act in response to increased consolidation in these firms.[6]

While the government failed to act in response to this growing threat of consolidation in all sectors, the government is not without the power to increase its regulatory and antitrust efforts as demonstrated by presidential history.[7] Under the Sherman Antitrust Act and the Clayton Act, the federal government has the power to punish monopolies and the power to prevent mergers to inhibit monopolies from arising.[8] This legislation may be considered a relic from an era where antitrust was used liberally to stop the monopolization of major industries. In the absence of its frequent use, the need for preventing consolidation has only proved more apparent. Antitrust legislation remains available as a tool to prevent the damaging effects of monopolies on the American economy; however, the government must enforce a regulation for it to be effective.

It is clear regulation alone is not enough to ensure firms with monopolistic tendencies will not continue to engage in monopolistic behavior.[9] Due to the vital importance of credit access to the American economy and the urgency required of policymakers during the financial crisis, legislators passed new regulations on the banking industry.[10] The government reacted to the "too big to fail" financial industry through bailouts of the companies and the creation of new laws, but the government has failed to respond to the growing threat large agricultural companies may pose when these companies have the ability to use monopoly power. Under the Trump Administration, the Department of Agriculture has withdrawn a rule under the Grain Inspection, Packers and Stockyards Act

4. *See* James M. MacDonald, *Mergers and Competition in Seed and Agricultural Chemical Markets*, ECON. RES. SERV. (Apr. 03, 2017), https://perma.cc/7X8J-99WV.

5. *Id.*; *see also* Gil Gullickson, *10 Ag Mergers and Acquisitions from 2017*, SUCCESSFUL FARMING (Dec. 12, 2017), https://www.agriculture.com/news/business/10-mergers-and-acquisitions-for-2017.

6. Austin Frerick, *To save rural Iowa, we must oppose Monsanto-Bayer merger*, DES MOINES REG. (July 20, 2017), https://perma.cc/77A6-BQ4F.

7. *Id.*

8. *See* 15 U.S.C. §§ 1-7 (2018); 15 U.S.C. §§ 12-27 (2018).

9. *See* Bump, *supra* note 2.

10. *See id.*

(GIPSA), providing clear definitions for certain predatory practices by agriculture corporations.[11] To effectively regulate monopolistic tendencies it also takes an active administration responsible for enforcing the law.

The government must take the lead in preventing the creation of monopolies by exercising its power under both the Sherman Antitrust Act and the Clayton Act to block the consolidation of agribusiness. If they fail to do so, these companies will continue to grow their already considerable market power.[12] Regulators must take action to reduce the consolidation of this vital industry through regulations promoting competition and prevent mergers. The government must also use their regulatory powers to break up companies if necessary to protect the public from monopolies.[13]

For the government to address the threats posed by growing consolidation, changes in antitrust law are necessary. Economists from the Chicago School of Economics (Chicago School) and the writings of D.C. Circuit Judge Robert Bork (Judge Bork) shaped antitrust law.[14] While embracing quantitative measures of the economic harm of monopolies, courts now base determinations about whether monopoly power exists on whether consumers pay increased prices.[15] Under the current framework, companies may gain monopoly power as long as consumers are not impacted. To update antitrust for the modern era, the use of test cases and legislation will likely be necessary to call into question the efficacy of using a price-focused interpretation of antitrust law. Through this, courts may once again interpret antitrust law as intended—to protect competition.

II. THE GOVERNMENT'S TOOLS TO PREVENT MONOPOLIES

The first piece of legislation, which the government may use to regulate and prevent the presence of monopolies, is the Sherman Antitrust Act.[16] The Act allows the government to regulate and punish monopolistic behavior.[17] It provides criminal penalties for individuals using monopoly power when they affect interstate commerce.[18] The Act allows the government to take regulatory action

11. David Dayen, *Trump Sides With Big Agriculture Over Family Farmers*, NATION (Oct. 18, 2017), https://perma.cc/US5Z-Z4D9.

12. *See* Frerick, *supra* note 6.

13. *Id.*

14. Dylan Matthews, *'Antitrust was defined by Robert Bork. I cannot overstate his influence.'*, WASH. POST (Dec. 20, 2012), https://www.washingtonpost.com/news/wonk/wp/2012/12/20/antitrust-was-defined-by-robert-bork-i-cannot-overstate-his-influence/.

15. Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979).

16. 15 U.S.C. §§ 1-7 (2018).

17. 15 U.S.C. § 1.

18. *Id.*

when it determines monopolistic behavior has affected international trade if such conduct has a direct, substantial, and reasonably foreseeable effect" on interstate commerce and export trade from the United States.[19] While the government has the ability to impose criminal penalties for engaging in monopolistic behavior, the government also has the ability to use forfeiture to seize the assets of a monopolist.[20] The intent of the law is to prohibit "contracts, combinations, and conspiracies that unreasonably restrain interstate and foreign trade."[21] Competition and lower prices allow a firm to drive out its competition without violating the Act.[22] This also gives the government the power to break up corporations using monopolistic behaviors and practices.

The next piece of legislation the government may use to prevent the growth of monopolies through merger is the Clayton Act.[23] The Clayton Act prohibits mergers if the merger would discourage competition.[24] Much of the economic foundation of this regulation surrounds the theory of Cournot oligopoly.[25] Under this theory, as firms compete, they are profit maximizers and take the output of others as a given; therefore, as the number of firms fall, the price of the good rises.[26] This theory provides a public policy basis for which to regulate industry. It demonstrates monopolies can cause consumer harm if they are not prevented.[27] This law allows the government to both challenge proposed mergers and to prevent mergers of companies in order to prevent the accumulation of monopoly power.[28] Because economists identified a relationship between the market share of firms and the price of goods, consumer harm infers consolidation.[29] Under the Clayton Act, mergers are held to be illegal, if the acquiring company or the combined market share "accounts for 20% or more of the market."[30] Therefore, this legislation is useful to prevent the growth of corporations by acquisition and

19. 15 U.S.C § 6a (2018).

20. 15 U.S.C § 6.

21. *Antitrust Laws and You*, U.S. DEP'T JUSTICE, https://perma.cc/Z23A-AN3F (archived Jan. 25, 2019).

22. *Id.*

23. 15 U.S.C. §§ 12-27 (2018).

24. 15 U.S.C. §§ 13a, 18.

25. TIMOTHY J. BRENNAN, THE ECONOMICS OF COMPETITION POLICY: RECENT DEVELOPMENTS AND CAUTIONARY NOTES IN ANTITRUST REGULATION 5 (Jan. 2000), https://perma.cc/E294-ZKPU.

26. *Id.* at 5-6.

27. *Id.* at 2.

28. *Antitrust Laws and You*, *supra* note 21.

29. BRENNAN, *supra* note 25, at 2.

30. U.S. v. Von's Grocery Co., 384 U.S. 270, 302(1966) (citing CARL KAYSON & DONALD F. TURNER, ANTITRUST POLICY; AN ECONOMIC AND LEGAL ANALYSIS 133-36 (1959)).

merger through demonstrating that consolidation would result in decreased competition and lead to consumer harm.

While the Sherman Antitrust Act and the Clayton Act make up the foundation of American antitrust law, subsequent action taken by courts has flipped antitrust on its head.[31] In the late 1970s and 1980s, courts made a conscious decision to move away from economic structuralism in favor of considerations of price because of the influence of Judge Bork and the Chicago School.[32] Market participants find foundation in structuralism on the idea that economic concentration in a market encourages anticompetitive conduct.[33] Greater concentration allows for increased likelihood of market concentration, increased barriers to entry, and decreased power of consumers against corporations.[34] Prior to the late 1970s, structuralism was the foundation of antitrust analysis and provided a foundation on which courts could take an activist role in preventing mergers and acquisitions.[35] Use of economic structuralism as a basis for the prevention of anticompetitive conduct allowed courts and regulators to prevent both vertical and horizontal mergers.[36] This involved regulators looking to not only the size of the company within the market but also looking to whether a merger would create conflicts of interest.[37]

While structuralism provided the economic basis for antitrust during the 1960s and 1970s, courts in the late 1970s and 1980s adopted the ideas of the Chicago School which used price theory as a basis for antitrust law in a replacement of the former paradigm.[38] The Chicago School gives greater credence to the market. It believes rational actors will behave in a profit maximizing fashion and a failure of firms to do so will lead to punishment of a company by its competitors.[39] A primary difference between structuralism and the price theory approach is that structuralists believe industrial structure results in certain

31. *See generally* Reiter v. Sonotone Corp., 442 U.S. 330 (1979).

32. Khan, *supra* note 1, at 718.

33. *Id*. (citing JOE S. BAIN, INDUSTRIAL ORGANIZATION # (2d ed. 1968)); KAYSON & TURNER, *supra* note 30; Joe S. Bain, *Workable Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence*, 40 AM. ECON. REV. 35, 36-38 (1950).

34. Khan, *supra* note 1, at 719-20.

35. *See id*. at 718.

36. *Id*.

37. *Id*.

38. *Id*. at 718-19 (citing RAGHURAM R. RAJAN & LUIGI ZINGALES, SAVING CAPITALISM FROM THE CAPITALISTS (2003), https://perma.cc/R7JY-BJTP).

39. *Id*. at 719 (citing Marc Allen Eisner, Antitrust and the Triumph of Economics 107 (1991)).

behavior, but followers of the Chicago School find structure is a result of the behavior of market actors.[40]

As a result of this change of the economic paradigm, there are two substantive changes in economic factors courts consider in their understanding of modern antitrust analysis. First, courts look less to firm and market structure when considering anticompetitive conduct.[41] Using the Chicago School interpretation, because barriers to entry are a result of competition and not preexisting factors which firms may exploit, they cannot be exploited to gain market power due to the constantly changing market conditions.[42] Second, the focus on whether it is acceptable to regulate has shifted from an approach examining the structure of the firm and its place in the market to a consumer-focused view.[43] This view, created by Judge Bork's seminal work, *The Antitrust Paradox*, and the Chicago School of Economics wherein the focus of antitrust legislation should be on consumer welfare rather than the structure of the marketplace.[44] Thus, an antitrust policy focused on prices while ignoring the structural inefficiencies caused by barriers to entry has defined American antitrust law.

These changes in American antitrust law appear, in retrospect, to be a dramatic transition away from the roots of the legislation; however, during the 1970s, it was less of a swinging pendulum and more of a gradual trend against structuralism.[45] Antitrust law is a unique area of law where changes in economic thought greatly influence the way courts determine whether conduct or merger results in monopoly power.[46] Thus, the gradual move away from structuralism in the 1970s and 1980s is a result of the widespread adoption of Chicago School ideas by economists and their application of Judge Bork's *The Antitrust Paradox* to the courts.[47]

40. *Id.* (citing ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978)).

41. *See id*. at 719-20 (citing Marc Allen Eisner, Antitrust and the Triumph of Economics 10 (1991)).

42. *Id.* at 720 (citing MARC ALLEN EISNER, ANTITRUST AND THE TRIUMPH OF ECONOMICS (1991)).

43. *Id.* (citing BORK, *supra* note 40, at 7 n.32).

44. *Id.* (citing ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 7 (1993)).

45. William E. Kovacic, *The Modern Evolution of U.S. Competition Policy Enforcement Norms*, 71 ANTITRUST L.J. 377, 393 (2003).

46. *Id.* at 401 (citing State Oil Co. v. Khan, 522 U.S. 3, 15-18 (1997)).

47. Khan, *supra* note 1, at 719 (citing RAGHURAM R. RAJAN & LUIGI ZINGALES, SAVING CAPITALISM FROM THE CAPITALISTS (2003)), https://perma.cc/R7JY-BJTP).

III. MONOPOLIES AND THEIR EFFECTS

There are two types of monopolies, regulators consider for purposes of creating regulations.[48] First, a monopoly can be a pure monopoly—where a monopolist is the single supplier in a market.[49] However, more common is the case in which a single firm controls a significant market share; therefore, monopolies can include duopolies and oligopolies, which while not the sole participant in a market, engage in monopolistic behavior.[50] One of the primary dangers of a monopoly is the increased barrier of entry making it infeasible for new firms to enter a market without significant upfront capital expenditures. A monopoly can create significant barriers to entry through economies of scale, predatory pricing, limit pricing, high set-up costs, high sunk costs, advertising, loyalty schemes, brand loyalty, exclusive contracts, and vertical integration.[51] Barriers to entry are "[c]onditions or circumstances that make it very difficult or unacceptably costly for outside firms to enter a particular market to compete with the established firm or firms already selling the good or service involved."[52]

The first of these competition-preventing barriers is the ability of firms to exploit economies of scale. An economy of scale exists where it becomes less costly and more efficient to engage in a type of business as size increases.[53] Further, the likelihood of a monopoly increases in an industry with high, upfront marginal costs and low and decreasing marginal costs through size.[54] An industry is especially susceptible to a business exploiting economies of scale when the products upfront capital expenditure is high but the marginal cost is relatively low.[55] In high technology industries, economies of scale exist due to the use of patents, high research and development costs, as well as traditional efficiencies from the size of the corporation.[56] Further, many companies also branch out into related industries, presenting an array of products that work together in a sort of ecosystem.[57] Dominance in the market and in markets for related products makes

48. *Monopolistic competition*, ECON. ONLINE, https://perma.cc/3UL4-7QMB (archived Jan. 25, 2019).

49. *Id.*

50. *Id.*

51. *Monopoly Power*, ECON. ONLINE, https://perma.cc/GE4Q-2HGD (archived Jan. 25, 2019).

52. Paul M. Johnson, *Barriers to Entry*, AUBURN U.: GLOSSARY POL. ECON. TERMS (2005), https://perma.cc/B9QB-6LEE.

53. *Monopoly Power*, *supra* note 51.

54. *Id.*

55. *Id.*

56. *Id.*

57. *Id.*

it difficult, if not impossible, to avoid the use of products from the corporation or escape their use by transitioning to other products.[58] Therefore, markets with high fixed and low marginal costs are especially vulnerable to a monopolist.[59]

A monopoly may provide substantive benefits through its exploitation of economies of scale resulting in decreased marginal cost. The destructive power of monopolies far overshadows any attractive qualities they possess.[60] Monopolies may provide some benefits through decreases in cost and increases in efficiencies because economies of scale favor corporations of their size and scope.[61] Monopolization results in higher prices, restricted output, situations where there is asymmetric information, inefficient producers, and inefficiently allocated goods.[62] This results in diminished consumer surplus, net welfare loss, and reduced employment.[63] Monopolistic actors create a de facto sales tax through increased price and decreased supply.[64] Further, because this tax operates similar to a sales tax, it is necessarily regressive.[65] Additionally, monopolists have the ability to harm society by reducing output below the socially optimal level while also charging more for goods.[66] Monopolies harm the consumer through their effects—whether monopoly power is intentional or not.

While demonstrating the existence of barriers to entry and other harms of monopolies would prove useful in a structuralist approach, under the modern approach, proof of effects to price are required. Reductions in the number of firms have an effect on price, and can demonstrate the existence of monopoly.[67] The impact on price is demonstrated by decreases in competitive conduct or in the number of firms.[68] While barriers to entry, such as the existence of an economy of scale, would not itself be sufficient under the new standard, demonstrating the

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.*

62. *Id.*

63. *Id.*

64. Lina Khan & Sandeep Vaheesan, *Market Power and Inequality: The Antitrust Counterrevolution and its Discontents*, 11 HARV. L. & POL'Y REV. 235, 244-45 (2017) (citing Sean Higgins et al., *Comparing the Incidence of Taxes and Social Spending in Brazil and the United States*, 62 REV. INCOME & HEALTH S22 (2016)).

65. *Id.*

66. *Id.* at 238 (citing Thomas G. Krattenmaker et al., *Monopoly Power and Market Power in Antitrust Law*, 76 GEO. L.J. 241, 250-51 (1987)).

67. *Monopoly Power*, *supra* note 51.

68. *Id.*

economy of scale has negative effects on prices for consumers and would help a regulator satisfy their requirement under the Chicago School analysis.[69]

IV. BIG AG'S MONOPOLISTIC TENDENCIES

Moving forward, it will help to consider these massive companies as monopolies for purposes of regulation. These corporations, while not pure monopolies, appear monopolistic due to their behavior and large sizes.[70] These companies large market shares in seed production and related agriculture like chemicals result in operating with monopolistic power.[71] Further, consider these companies as monopolies, because of their patents and creative use of mergers to obtain greater market share.[72] This trend, however, is not a recent phenomenon, occurring within the industry since the late 1990s.[73] In fact, of the six largest companies in the markets of seed and agricultural chemicals, five of the companies are undergoing mergers.[74] These companies create barriers of entry through their economies of scale, the high research and development costs necessary to compete, and horizontal efficiencies. High research and development costs make it difficult, if not impossible, for other companies seeking to enter the market for seed or agricultural chemicals. Biotechnology is an industry with high fixed costs, low marginal costs, and high research costs.[75] This is a natural barrier to entry for new firms. The legal protections afforded to these corporations through patents reinforce these natural barriers.[76] In biotechnology, patents have helped to create monopolistic power and force increased prices.[77] Further, while there are some benefits to these monopolies, the benefits are small when compared to the damage they inflict on the market.[78] The size of these companies leads to economies of

69. Khan, *supra* note 1, at 716-17.

70. Brian L. Buhr, *Economics of Antitrust in an Era of Global Agri-Food Supply Chains: Litigate, Legislate and/or Facilitate?*, 15 DRAKE J. AGRIC. L. 33, 33-34 (2010); *see* Dana Varinsky, *Trump could approve a giant merger that's scaring American farmers*, BUS. INSIDER (Feb. 5, 2017), https://perma.cc/9AXC-8K59.

71. *See Monopoly Power*, *supra* note 51.

72. Amanda Welters, Note, *Striking a Balance: Revising USDA Regulations to Promote Competition Without Stifling Innovation*, 13 MINN. J.L. SCI. & TECH. 407, 422 (2012).

73. *Id.*

74. MacDonald, *supra* note 4.

75. Albert K.A. Acquaye & Greg Traxler, *Monopoly Power, Price Discrimination, and Access to Biotechnology Innovations*, 8 J. AGROBIOTECHNOLOGY MGMT. & ECON. 127, 128 (2005); *Monopoly Power*, *supra* note 51.

76. *See* Acquaye & Traxler, *supra* note 75, at 127.

77. *Id.*

78. *See Monopoly Power*, *supra* note 51.

scale. The primary benefit claimed by these companies is an increase in yield.[79] Although increases in size have a positive relationship with increases in yield, the increases are not proportional.[80] Initially, increasing the market share of a corporation increases the yield of their seeds.[81] This proportional increase is only substantial when there are small increases in market share, while later increases lead to inconsequential increases in yield.[82]

V. COMPETITION AND EFFICIENCY

Competition is an essential element of ensuring that a market is operating efficiently by checking the self-interested behavior of any one buyer or seller.[83] Thus, the competition between multiple firms in a market prevents a seller of goods from taking advantage of any buyers by keeping prices low.[84] Although multiple buyers and sellers will increase competition, a shrinking number of sellers would conversely allow these parties to exercise their market power over buyers of their goods.[85] This is not something unique to any single industry, markets of all types are undergoing consolidation. [86] Thus, the government should promote competition by using its power to regulate these firms.

In mainstream economics, competition is essential.[87] However, there are two views splitting how economists wish to achieve these aims.[88] The first approach is to use regulation and antitrust enforcement to ensure competition.[89] Alternatively, other economists believe a company's dominance of a market should correct itself.[90] Here, Adam Smith, the father of mainstream economics, informed the view:

> It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own interest. People of the same trade seldom meet together, even for merriment or diversion, but the

79. Varinsky, *supra* note 70.

80. *Id.*

81. *Id.*

82. *Id.*

83. *The Role of Self-Interest and Competition in a Merket Economy*, FED. RES. BANK ST. LOUIS: ECON. LOWDOWN PODCAST SERIES, https://perma.cc/342K-56WV (archived Apr. 18, 2019).

84. *Id.*

85. *Id.*

86. Varinsky, *supra* note 70.

87. *Competition is all*, ECONOMIST (Dec. 4, 2003), https://perma.cc/48M7-4RLE.

88. *Id.*

89. *Id.*

90. *Id.*

> conversation ends in a conspiracy against the public, or in some contrivance to raise prices.[91]

Mainstream economist's views about the need for possible action against companies in high technology industries divides the fields.[92] Economists have held that the general rule is competition produces allocative efficiency.[93] This means competition provides higher output levels than highly regulated markets.[94] Competition deters bad behavior of managers because they have to make decisions based of their colleague's decisions. [95] However, the use of regulation in some markets may be more efficient than competition when the incentive to invest in that market is limited, such as in biotechnology markets.[96]

While regulation can halt firms from increasing in size, lobbying efforts and political influence of these corporations reduce the likelihood of limiting the growth of firms. [97] The market power of a company provides "tremendous political clout."[98] The repeal of regulations across every industry during the early Trump Administration shows the success of these efforts.[99] Agricultural monopolies used their influence to repeal a set of regulations under GIPSA.[100] The GIPSA rule provided clearer definitions of what would be considered predatory or retaliatory behavior by large firms against individual farmers.[101] The lobbying efforts persuaded the administrator of GIPSA that the rule "may lead to more equitable contracts;" however, the cots to the GIPSA did not outweigh the benefits of the rule.[102] Thus, these lobbying efforts allow monopolists to shape public opinion and policy through their will.

Outside of lobbying efforts, companies with political influence use agency capture (otherwise known as regulatory capture) to prevent regulators from engaging in actions against a corporation or industry.[103] A captured agency is:

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91. *Id.*

92. *Id.*

93. Carmine Guerriero, *When is regulation more efficient than competition?*, VOX (Nov. 21, 2010), https://perma.cc/83XR-ZJHR.

94. *Id.*

95. *Id.*

96. *Id.*

97. Khan & Vaheesan, *supra* note 64, at 266-67.

98. *Id.*

99. *37 Ways Donald Trump Has Remade the Rules for Business*, WALL STREET J.: POLITICS (Jan. 17, 2018), https://perma.cc/HUK6-VS5Q.

100. Dayen, *supra* note 11.

101. *Id.*

102. *Id.*

103. Scott Hempling, *"Regulatory Capture": Sources and Solutions*, 1 EMORY CORP. GOVERNANCE AND ACCOUNTABILITY REV. 23, 24 (2014).

> A government agency, especially a regulatory agency, that is largely under the influence of the economic interest group(s) most directly and massively affected by its decisions and policies – typically business firms (and sometimes professional associations, labor unions, or other special interest groups) from the industry or economic sector being regulated.[104]

This creates a problem wherein the government creates ineffective regulations, or regulations benefiting the industry group the agency has captured.[105] Corporations or industries are part of interest groups when they "share common traits, attitudes, beliefs, and/or objectives who have formed a formal organization to serve specific common interests of the membership."[106] Regulatory capture is a legal use of political influence by corporations allowing it to control a regulatory agency.[107] What separates regulatory capture activity from illicit activity is whether the activity is deemed illegal, as "[r]egulatory capture is neither corruption nor control."[108] "A regulator is 'captured' when [the regulator] is in a constant state of 'being persuaded.'"[109] Other factors to tell if an agency is captured is by looking at whether the regulatory agency is exercising a vision, defining the issue, looking to positions over the perspectives, and the professional expectations of the employees.[110] Finally, an agency under capture looks to a company-centered approach to look at monopolists as good for the county or providers of public services.[111] While regulatory capture does not mean an agency is acting in opposition to the public interest, regulatory capture means the attitude of the regulator is more favorable to the agency being regulated than the regulators actions.[112] Due to their large budgets spent on lobbying, these companies have successfully engaged in regulatory capture.

104. Paul M. Johnson, *Captured Agency*, AUBURN U.: GLOSSARY POL. ECON. TERMS (2005), https://perma.cc/R74C-BA8U.

105. Hempling, *supra* note 103, at 25.

106. Paul M. Johnson, *Interest group*, AUBURN U.: GLOSSARY POL. ECON. TERMS (2005), https://perma.cc/7GRH-7RTV.

107. Hempling, *supra* note 103, at 25.

108. *Id.*

109. *Id.*

110. *Id.* at 25-28.

111. *Id.* at 28.

112. *Id.* at 25.

VI. MAJOR MERGERS IN BIOTECHNOLOGY

Three major mergers currently threaten to reduce the amount of competition in these industries: Monsanto-Bayer, Dow-DuPont, and Syngenta-ChemChina.[113] These possible mergers could lead these three companies to control nearly 80% of all corn seeds sold in the world.[114] While other small firms currently compete for customers of biotech in the United States, major players dominate the landscape.[115] Through mergers with other companies and purchases of contracts in these areas, the number of companies with the ability to compete is shrinking while the major players are only continuing to increase their market share.[116] With so few companies in the industry, possible mergers threaten to reduce the competition for American consumers. Meanwhile these corporations carve up different regions of the world for their expansions.

The largest and perhaps most concerning merger potentially allowed is the merger between Monsanto and Bayer, American and German companies, respectively.[117] If allowed to succeed, the Monsanto-Bayer merger would be the largest in the agricultural industry.[118] The merger would involve Bayer purchasing Monsanto for $66 billion. [119] This merger would create a company controlling approximately one-third of the seed and pesticide market.[120] This company would combine two of the six largest seed, biotech, and agricultural chemical sales companies in the world.[121] Currently, Monsanto leads the world in seed and biotech sales; Bayer leads the world in the sale of agricultural chemicals.[122] While this deal is pending approval from regulators in the European Union, the companies stated American regulators informed them the merger would not implicate national security.[123]

113. Michaela Tucker & Frank Morris, *Farmers, Antitrust Activists Are Worried That Big Ag Is Only Getting Bigger*, KBIA: BUS. BEAT (Oct. 19, 2016), https://perma.cc/S6FD-8V7X; Varinsky, *supra* note 70.

114. Tucker & Morris, *supra* note 113.

115. Chuck Abbott, *Turning The Big 6 Into A Big 3 Will Take A Bit Longer*, SUCCESSFUL FARMING: BUS. NEWS (Jan. 19, 2018), https://perma.cc/UNZ3-NDNY.

116. Geoff Colvin, *Inside China's $43 Billion Bid for Food Security*, FORTUNE (Apr. 21, 2017), https://perma.cc/F4YW-WRZU.

117. MacDonald, *supra* note 4.

118. Tucker & Morris, *supra* note 113.

119. MacDonald, *supra* note 4.

120. Varinsky, *supra* note 70.

121. MacDonald, *supra* note 4.

122. *Id.*

123. Abbott, *supra* note 115.

Another prominent merger in biotech is the Dow-DuPont merger.[124] Similar to the merger of Monsanto and Bayer, the Dow-DuPont merger created a company in control of approximately one-fourth of the seed and pesticide market.[125] Further, similar to the merger of Monsanto and Bayer, this would consolidate two of the top six seed and agrichemical companies in the world.[126] However, distinct from the Monsanto-Bayer merger, this is merger of two American companies.[127] Contrast this with a merger of an American company and a foreign competitor.[128] Completed on August 31, 2017, this $130 billion merger took two years. [129]

The final prominent merger is the takeover of Syngenta by ChemChina.[130] The takeover was "China's biggest foreign takeover to date".[131] The $43 billion deal, finalized in June, posed significant questions for regulators as they considered the national security implications of allowing a Chinese state-owned enterprise to purchase the corporation.[132] Despite concerns, regulators eventually allowed the purchase of Syngenta, although they required ChemChina to sell parts of the company.[133]

Of the three mergers, two have been allowed by regulators with little pushback.[134] In the case of Syngenta and ChemChina, even though the European Union required the partial sale of Syngenta before its acquisition, they nevertheless approved the sale despite growing concerns about both consolidation and rising Chinese global investment.[135] However, due to the sheer size and scope of the Bayer's $170 billion merger with Monsanto, European Union and American regulators alike have a case to intervene and prevent these three companies from exercising dominance over this market.[136]

124. Varinsky, *supra* note 70.

125. *Id.*

126. MacDonald, *supra* note 4.

127. *Id.*

128. *Id.*

129. Abbott, *supra* note 115.

130. Varinsky, *supra* note 70.

131. REUTERS, *ChemChina Clinches Its $43 Billion Takeover of Syngenta*, FORTUNE (May 5, 2017), https://perma.cc/9RZ7-BNA6.

132. *Id.*

133. *Id.*

134. Abbott, *supra* note 115.

135. *Id.*

136. *Id.*

VII. THE CASE FOR PREVENTING ANTICOMPETITIVE CONDUCT

The government uses antitrust in three situations: (1) where there is collusion; (2) where there are efforts to monopolize or monopolization itself; and (3) in cases of mergers where competition would lessen.[137] The merger and conduct of Bayer and Monsanto raise questions involving all areas concerning the government's power to regulate anticompetitive conduct.

Claimants have been unsuccessful in cases trying to prove Monsanto's possible anticompetitive conduct. In *SuperTurf, Incorporated v. Monsanto Company*, Monsanto had created the market for artificial turf, and SuperTurf alleged that Monsanto had monopolized.[138] While the plaintiff did not accuse Monsanto of gaining its monopoly illegitimately, it claimed Monsanto kept its dominant share of the market through illegal means by using exclusionary practices to prevent competition in the market by the elimination of competition, pricing below cost, disparaging the product of their competitors and harassing the plaintiff.[139] However, the court held that even though these practices were anticompetitive they were permissible because the prevention of monopolistic behavior does not stop a company from aggressively competing with its rivals.[140] An inability to show Monsanto's conduct rose above merely aggressive competition to a standard demonstrating an intent to monopolize thwarted attempts to establish Monsanto was a monopoly in the market for turf.[141]

Further, the plaintiff alleged Monsanto attempted to monopolize the market and restrict competition.[142] However, the plaintiff was unable to demonstrate the intent required to show there was a conspiracy to monopolize the market for artificial turf.[143] It remains unproven that Monsanto used its dominant position in order to achieve a monopoly.[144]

To demonstrate a company acted as a monopoly through its conduct in the marketplace, a plaintiff or the government must show there was sufficient evidence demonstrating the monopolist engaged in behavior designed to prevent effective competition.[145] However, this behavior may be countered with information showing the actions of the accused monopolist were only those of a "normal,

137. Douglas Ross, *Antitrust Enforcement and Agriculture*, U.S. DEP'T JUST. (Aug. 20, 2002), https://perma.cc/A6K9-BWUY.

138. SuperTurf, Inc. v. Monsanto Co., 660 F.2d 1275, 1276-77 (8th Cir. 1981).

139. *Id.* at 1280-81.

140. *Id.* at 1280.

141. *See id.* at 1280-81.

142. *Id.* at 1282-83.

143. *Id.* at 1283.

144. *See Id.* at 1275-83.

145. *Id.* at 1280.

properly aggressive competitor."[146] The court held a monopolist may not "prevent[] effective competition" but may instead compete aggressively.[147] If a firm is merely competing aggressively, it does not violate the "rule of reason" standard the court adopted in *Standard Oil Company v. United States*.[148]

A company may also act as a monopoly by attempting to corner the marketplace. For the government or a private entity to show a company is intending to behave as a monopoly it must "attempt[] to monopolize any part of the trade or commerce among the several States."[149] The government or plaintiff must prove a company has the "specific intent to monopolize and a dangerous probability of success within a relevant product and geographic market."[150] For specific intent to exist, a regulator must show there is "an intent to control prices or restrict competition unreasonably."[151] Therefore, the government may find the existence of a monopoly either through actions taken with the intent to discourage or harm competition.

Further to show violations of the Sherman Act and Clayton Act have taken place, the government or another actor must prove that there was an adverse effect on consumers because of the monopolist's actions.[152] There must be an "adverse effect on prices, output, or quality of goods in the relevant market . . . " for an injury to have taken place.[153] More recently, this has transitioned into a requirement that monopolist's actions effect prices of consumer goods.[154] This move away from analyzing the structure of the company makes it more difficult to demonstrate a company is exhibiting monopolistic tendencies.[155]

The focus on consumer welfare marked a major shift in American antitrust policy.[156] In *Reiter v. Sonotone Corporation*, the Supreme Court declared consumer welfare was one of the foundations of the Sherman Act.[157] While

146. *Id.* (citing Int'l Travel Arrangers, Inc. v. W. Airlines, Inc., 623 F.2d 1255, 1268 (8th Cir. 1980)).

147. *Id.*

148. *Id.* (citing Standard Oil Co. v. United States, 221 U.S. 1 (1911)).

149. *Id.* at 1282 (citing 15 U.S.C. § 2 (2018)).

150. *Id.* at 1282-83.

151. *Id.* at 1283 (citing United States v. Empire Gas Corp., 537 F.2d 296, 302 (8th Cir. 1976)).

152. Aventis Envtl. Sci. USA LP v. Scotts Co., 383 F. Supp. 2d 488, 503 (S.D.N.Y. 2005).

153. *Id.* (citing Jefferson Par. Hosp. v. Hyde, 466 U.S. 2, 31 (1984); Capital Imaging Assocs. v. Mohawk Valley Assocs., 996 F.2d 537, 541 (2d Cir. 1993)).

154. Khan, *supra* note 1, at 720-21.

155. *See id.* at 719-20.

156. *Id.* at 718-19.

157. *Id.* at 720 (citing Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (quoting ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 66 (1993)).

criticized by scholars, this approach has been dominant since its adoption by the court, replacing the focus on the structure of the corporation. This drove scholarly analysis prior to the work of Judge Bork and the Chicago School.[158] However, consumer welfare is not the only consideration made by regulators; rather they may look at other factors in conjunction with consumer welfare.[159] Thus, to bring a successful action under current antitrust law, there must be a showing of damage to consumer welfare in the event of a merger or through the corporation's actions.[160]

VIII. CAN AND SHOULD THE GOVERNMENT ACT?

Due to growing consolidation in agricultural markets, the government likely has a case to regulate and prevent the acquisition of these firms under the Sherman and Clayton Acts.[161] Allowing these mergers will reduce competition in a market where three large firms dominate seed and chemical production.[162] When doing so, the court must consider the elements making up a violation of the act, as well as the impact this has on the market and consumers.[163] When determining whether conduct violates antitrust provisions, an analysis of the market impact is the basis on which the decision is made.[164] To analyze cases such as these, the government should look to various economic factors to determine whether the merger of these companies would lead to consumer benefit or detriment.

First, regulators may show firms colluded as a justification for regulation. For collusion to have occurred, a regulator must show there was "willful subversion of the normal operation of free markets" which leads to higher prices and decreased choice.[165] Regulators are unlikely to do so because courts in the past have already held that Monsanto's agreements with dealers to operate exclusively do not violate the Sherman Act.[166] A 2009 investigation by the Associated Press found Monsanto used exclusive dealer agreements to restrict competition and

158. *Id.* at 721 (citing Barak Orbach, *Foreword: Antitrust's Pursuit of Purpose*, 81 FORDHAM L. REV. 2151, 2152 (2013)).

159. *Id.* (citing U.S. DEP'T JUST. & FED. TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES # (Aug. 2010), https://perma.cc/N5ZU-Z85X).

160. *Id.* (citing Ginzburg v. Mem'l Healthcare Sys., Inc., 993 F. Supp. 998, 1015 (S.D. Tex. 1997)).

161. 15 U.S.C. § 2 (2018).

162. Abbott, *supra* note 115.

163. Khan, *supra* note 1, at 720 (citing Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979)).

164. Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 762 (1984).

165. Ross, *supra* note 137.

166. Monsanto Co. v. Scruggs, 342 F. Supp. 2d 568, 583 (N.D. Miss. 2004).

make it more difficult for competitors to enter a market.[167] One of the considerations is how these agreements affect consumers.[168] While a decrease in competition does not benefit consumers, regulators may be able to prove harm to consumers by not being able to find better products and prices elsewhere due to the lack of competition.

Regulators may choose to investigate whether firms had the intent to monopolize and thus can be regulated under this justification. A regulator will have to prove a company has a high market share and engaged in conduct to gain or continue to operate as a monopoly.[169] A regulator must also attempt to show that a firm's conduct was for the purpose of gaining or maintaining a monopoly.[170] While firms may need to have a market share in excess of 50% in some instances to be considered a monopoly, regulators may consider a submarket or geographical region to determine a monopoly rather than looking to the market as a whole.[171] Here, there appears to be a strong case in which the government may regulate large agriculture companies for monopolistic practices. Monsanto exerted its influence through its use of gene patents, responsible for 95% of all soybeans and 80% of all corn grown.[172] This influence was used to collude with other businesses and effectively shut out competitors through exclusive dealer agreements.[173] By providing stringent agreements, they intended to drive competitors out of the market due to an inability to sell to seed companies. Monsanto has used anticompetitive conduct that may rise to the level of antitrust violations.

Monsanto also used its market position to force out competitors or limit their gains.[174] With overwhelming majorities of the corn and soybean markets containing genes patented by Monsanto, the company forces dealers to either do business with Monsanto or another company making it difficult for competitors to enter the market.[175] This action is consistent with a monopolist because it aims to drive out competition rather than to outcompete it. Further, this not only drives out Monsanto's current competitors but also creates a barrier to entry for would-be competitors.

167. *AP: Monsanto Strong-Arms Seed Industry*, CBS NEWS (Dec. 14, 2009), https://perma.cc/6K24-RS6T.

168. *See* Reiter v. Sonotone Corp., 442 U.S. 330, 343-44 (1979).

169. Ross, *supra* note 137.

170. *Id.*

171. *Id.*

172. *AP: Monsanto Strong-Arms Seed Industry*, *supra* note 167.

173. *Id.*

174. *Id.*

175. *Id.*

While each of the new "Big 3" will have an impressive market share, it is unlikely any one firm will have more than 50% of the market for seeds or agricultural chemicals. However, by using an analysis of smaller markets or geographical regions, it is more likely a firm is a monopoly due to its strong position in the manufacture of seeds or pesticides. By patenting 95% of all soybeans and 80% of all corn in the United States, Monsanto has a monopoly on the products and relevant submarkets.[176] Therefore, courts must decide whether the company has engaged in conduct consistent with a monopolist trying to increase its position or prevent others from entering the market.[177] Monsanto's aggressive actions to make its seeds and pesticides the only option available seems to indicate there was an intent to monopolize this market.

Finally, regulators may act to prevent a merger when it appears a monopoly will be created. By using the court's analysis in *Reiter*, it is relatively clear the consolidation has already hurt consumers.[178] Thus, this would allow the government to step in and take action before these mergers take place. Reducing competition naturally increases prices.[179] This is reflected in the producer price index for pesticide and agricultural chemicals.[180] It demonstrates a sharp increase over time in the price of agricultural chemicals followed by a long period of prices significantly higher than before the price spike.[181] Consolidating this industry to only three major firms will not lead to greater competition or benefit consumers.[182]

Further analysis would weigh either the market impact or the economic effect of the firm's behavior.[183] Based on the applicable research, it appears the merger of these companies will not lead to significant improvements in research and development while their large size already minimizes supply chain inefficiencies.[184] When analyzing whether gains will be made from improvements in efficiency, regulators should weigh the benefits of allowing these mergers against the detrimental effects of growing monopoly power.[185] While allowing these companies to merge benefits research and developments and promotes

176. *Id.*

177. *Id.*

178. Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (quoting ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 66 (1993)).

179. FED. RES. BANK ST. LOUIS, PRODUCER PRICE INDEX: PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING: AGRICULTURAL AND COMMERCIAL PESTICIDES AND CHEMICALS, https://perma.cc/5SLM-H5D3 (archived Apr. 19, 2019).

180. *Id.*

181. *Id.*

182. *Monopoly Power*, *supra* note 51.

183. Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 762 (1984).

184. Varinsky, *supra* note 70.

185. *See* Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 762 (1984).

efficiency, massive increases in market power offset these gains.[186] Further, the economic gains in efficiency grow relatively smaller as the company gets larger.[187]

IX. WILL THE GOVERNMENT TAKE ACTION AGAINST THESE FIRMS?

The government will not take action against these firms. The likelihood of preventing or even stemming the mergers of massive companies seems a thing of a bygone era.[188] Massive companies have grown to dominate nearly every conceivable market with the largest companies seeking to gobble up competitors.[189] Monsanto alone purchased more than thirty companies within the last decade.[190] Thus, competition is decreasing and the government has done little to prevent this.[191] While many firms have grown larger in size and market share, they have not passed this cost increase on to consumers. [192] Thus, the lack of competition amongst "big ag" has largely gone without consequence. Governments are wary of intervening because of the difficulty in proving harmful price effects when prices are relatively stable.[193]

However, incentives for politicians and regulators due to regulatory capture and strong lobbying efforts by these companies will likely prove fatal for any attempt to dissuade mergers or anticompetitive conduct of companies.[194] Even if the government can take action in these areas, it is unlikely it would do so due to a combination of factors that amplifies the money and influence of corporations.[195] For example, lobbying efforts waged through direct advocacy and contributions against members of the administration as well as members of congress is a factor.[196] As of February 10, 2018, agribusiness had donated over $22 million to candidates in preparation for the 2018 midterm elections.[197] Perhaps the most disturbing part of this is the amount of this money funneled directly to incumbents

186. *Monopoly Power*, *supra* note 51.

187. Varinsky, *supra* note 70.

188. *See generally* Standard Oil Co. v. United States, 221 U.S. 1 (1911).

189. Rana Foroohar, *The rise of the superstar company*, FIN. TIMES (Jan. 14, 2018), https://www.ft.com/content/95d16c88-f795-11e7-88f7-5465a6ce1a00.

190. *Id.*

191. Abbott, *supra* note 115.

192. Foroohar, *supra* note 189.

193. *Id.*

194. *See* PAT MOONEY, IPES FOOD, TOO BIG TO FEED # (Oct. 2017), https://perma.cc/PLW9-QS58.

195. *See Id.*

196. *See* Hempling, *supra* note 103.

197. *Agribusiness: Money to Congress*, OPENSECRETS.ORG, https://perma.cc/2VVR-RWA7 (archived Jan. 25, 2019).

with over $20 million spent.[198] This, however, pales in comparison to the over $60 million given to candidates in the 2016 elections.[199] Candidates from both parties receive money, however, this money disproportionately flowed to Republican candidates, who received over $44 million while Democratic candidates received over $16 million.[200] This is a longstanding trend in agribusiness with the percentage of money contributed to Republicans increasing over time.[201] In 1990, the first year statistics on spending for the industry were available, Republicans received only 55% of all contributions with Democrats receiving 45%.[202] Over time, however, this gap has widened with Republicans receiving 73% and 72% of all donations in the 2016 and 2018 cycles.[203] Besides campaign contributions, money makes its way into the process through lobbying efforts. In 2017 alone, the agribusiness industry collectively spent over $130 million in lobbying efforts.[204]

X. CONCLUSION

The impact of consolidation on the lives of consumers is easily noticeable. In a nation of 300 million people, over 44% of all online commerce occurs on a single website.[205] Most Americans shop at the same store,[206] and a strong majority use the same social media site.[207] Similarly, the primary producers of soybeans and corn is one company. The fact so few companies will control such a necessary industry is staggering and it is imperative for the government to act to correct this market inefficiency by taking remedial action to end the influence of the Chicago School and Judge Bork in modern antitrust law. However, this is not to suggest change will be easy, rather it is to suggest the approach taken by courts, where only consumer welfare is analyzed, does not account for the dangers of increasing consolidation even further outside of the price paid by consumers. Antitrust has the ability to unite both sides of the aisle, where free market advocates get the

198. *Id.*

199. *Id.*

200. *Id.*

201. *Agribusiness: Long-Term Contribution Trends*, OPENSECRETS.ORG, https://perma.cc/GCR6-95HY (archived Jan. 25, 2019).

202. *Id.*

203. *Id.*

204. *Agribusiness: Lobbying*, OPENSECRETS.ORG, https://perma.cc/TP7R-Z967 (archived Apr. 19, 2019).

205. Foroohar, *supra* note 189.

206. A staggering 95% of all Americans shopped at a Walmart in 2017. Krystina Gustafson, *Nearly every American spent money at Wal-Mart last year*, CNBC (Apr. 12, 2017), https://perma.cc/682L-9VA7.

207. 68% of Americans used Facebook in January of 2017. *Social Media Fact Sheet*, PEW RES. CTR.: INTERNET & TECH. (Feb. 5, 2018), https://perma.cc/9JJY-NJTW.

competition necessary to promote efficiency while those concerned about business becoming "too big to fail" will have the certainty of knowing the necessity of doing so will be greatly reduced. Therefore, lawmakers and courts should restore antitrust law's structuralist foundations and ensure Monsanto and DuPont do not dictate the world's food supply just because they have not raised consumer prices.