Corporate Concentration of Power in the Global Food System: Dynamics, Strategies and Implications

Xianxiang Zhu

Faculty of Art, University of Melbourne, Melbourne, Australia

xianxiangz@student.unimelb.edu.au

Abstract. This paper aims to explore how large food companies have achieved concentration of power and control over the food system through strategies such as vertical integration, horizontal integration, and instrumental power in the dynamics of globalisation and trade liberalisation. The trend towards trade liberalisation and deregulation from the 1980s onwards has facilitated the rise of large food companies, which now dominate every aspect of the food system from production to distribution. By analysing the strategies of large food companies and the impacts they have had, this study aims to help understand the high levels of concentration and potential risks in the current food system and to provide suggestions for governments to improve the food system. Based on the combing and analysing of existing studies, this paper searches the relevant literature of the last ten years in Google Scholar through keyword search, from which studies related to the concentration of corporate power are filtered out to reveal the corporate strategies of food companies and their effects by using the research methodology of literature study. It is found that food companies achieve complete stage control from production to sales through vertical integration, which improves productivity and product quality; the horizontal integration approach helps large food companies to expand their market share and technological complementarity; and instrumental power influences governmental decision-making. In addition, food companies actively responded to market demands and flexibly adjusted their products and services to meet consumer needs and preferences. The above strategies have strengthened the market dominance of food companies, but they have also oppressed farmers and small and medium-sized enterprises (SMEs) upstream in the supply chain, to the detriment of consumers, and have increased public health risks.

Keywords: Food companies; Concentration of power; Vertical integration; Horizontal integration; Instrumental power.

1 Introduction

Over the past few decades, the pattern of the global food industry has undergone profound changes due to globalised economic trends and policy orientations towards trade liberalisation, with a gradual shift from a commodity-based industrial regime to a corporate food regime [1]. In the 1980s, the onset of trade liberalisation, facilitated by

L. Chang et al. (eds.), *Proceedings of the 2024 8th International Seminar on Education, Management and Social Sciences (ISEMSS 2024)*, Advances in Social Science, Education and Humanities Research 867,
https://doi.org/10.2991/978-2-38476-297-2_99

agreements such as the WTO's Uruguay Round, has significantly reduced trade barriers and reshaped the dynamics of the agricultural sector. This shift allowed multinational corporations to expand their presence throughout the food supply chain, from crop cultivation to distribution, and adopt vertical and horizontal integration strategies to consolidate their market position. At the same time, the financialisation of the global economy has brought food companies closer to capital markets, facilitating their expansion through mergers and acquisitions financed by public and private equity. In this changing landscape, large food companies have used these strategies to dominate all aspects of the food industry, impacting both food market competition and agricultural practices globally and exacerbating the concentration of power and control within the food system [2]. Scholars have conducted a number of studies on the concentration of power in the food system. Scholars focusing on supply chains have shown how food companies control different supply chain segments to enhance market position and efficiency by comparing food supply chains in India, Brazil and China [3]. Scholars specialising in corporate mergers and acquisitions (M&A) quantitatively analysed M&A cases of major food companies in the United States, revealing how horizontal integration strategies can enhance market control [4]. In addition, Clapp and Fuchs analysed the use of instrumental power strategies of several multinational food companies [5], such as Nestlé and Das, demonstrating how they significantly influence food policies at the international and national levels to gain a strong market environment. However, even though studies have been conducted to examine and analyse the strategies of food companies at different levels, there are still shortcomings. They tend to examine the impact of one strategy in isolation and lack a comprehensive analysis of the interaction of multiple strategies. Therefore, the research question of this paper is how large food companies use these strategies in an integrated manner to strengthen the concentration of power and control over the food system in the context of globalisation and trade liberalisation. Its significance is to reveal the potential risks of the current food system by analysing the mechanisms of their action so as to provide a reference for policymakers.

2 Strategies for Food Corporations

2.1 Vertical Integration

Vertical integration is a strategy in which a company controls many different segments of its supply chain, as is common among the big food companies today, which control the food supply chain from crop cultivation to food processing to the distribution end of the chain [6, 7]. At the same time, a series of dynamics in the food system have contributed to the vertical integration in food companies. The trade liberalisation that began in the 1980s, which included the WTO's development of the Uruguay Round Agreement on Agriculture and the construction of numerous regional and bilateral agreements, has led to easing trade access restrictions and lowering tariff barriers in most countries [8]. These trade policies facilitated cross-border trade in agricultural and food products, leading to a significant increase in the role of transnational corporations (TNCs), such as food traders, which in turn progressively increased their control over the agricultural supply chain from production to distribution [9]. Moreover, with the rising wave of financialisation in the world economy, the food system is also becoming increasingly financialised, bringing food companies closer to the capital markets where they can more easily raise funds for consolidation through stocks and bonds. Financial intermediaries, such as investment banks, actively promote mergers between food companies and acquisitions of smaller companies by developing M&A strategies and providing financing [10].

Take the American company ADM as an example. It is one of the world's largest food trading companies (ABCD). From being a trader of agricultural products, it had integrated a series of links in the food industry chain, such as the supply of inputs, food processing, and the sale of derivative industrial products. It has become a company with significant control in the food industry. At the production and planting stage, although ADM does not operate farms, the company actively cooperates with soybean and corn growers, signing ordering contracts with farmers in advance to stipulate the quantity and varieties to be planted and cooperating with input companies (such as Syngenta) to provide farmers with genetically modified seeds and chemical fertilisers to ensure the quality and yield of agricultural products [11]. Through vertical integration at the production stage, ADM can access a stable supply of raw materials with guaranteed quality and safety standards. At the processing stage, ADM has invested in processing plants around the world to rapidly process agricultural products into a variety of products and industrial raw materials, such as corn for sweeteners and starch, soybeans for soybean oil, and combined with ethanol for industrial solvents. ADM is also actively researching and developing new processed products, such as pet nutrition products [12]. On the transport side, ADM had been involved in the global food trade for a long time and has accumulated a well-developed logistics network and expertise in land and sea transport and warehouse storage, which enables the company to efficiently and rapidly transport agricultural raw materials and processed agricultural products to all parts of the world [13]. On the sales stage, through the reduction of global trade barriers brought about by trade liberalisation, ADM is able to sell its products more efficiently to markets around the world, selling agricultural raw materials to the food processing industry or animal breeding industry, and selling processed products such as ethanol to industrial companies. ADM has taken advantage of the price advantage brought by the vertical integration of the supply chain to occupy a dominant position in the market while at the same time actively adjusting the supply of its products by market demand, thus more effectively improving the satisfaction of both consumers and consuming companies [13]. In short, by vertically integrating the supply chain from the production side to the sales side, ADM has eliminated intermediate links and their additional costs, improved the efficiency of its production operations, guaranteed the quality and quantity of its products, and facilitated the centralisation and growth of its power over the food system.

2.2 Horizontal Integration

Horizontal integration is a corporate strategy in which a company adopts a merger or acquires other companies at the same stage of the supply chain to increase its market share [14]. Integration between firms has become more common in recent years in various industries worldwide, and the food industry has followed the pattern of economic development, with food companies such as input companies becoming more and more concentrated [15]. Strategies for horizontal consolidation include mergers and acquisitions, depending on the firm's own growth and the size of the object of integration. Mergers often take place between large food companies, and some are based on the need for technological complementarities brought about by technological change, such as the emergence of herbicide-tolerant seeds, which has led to an increasing link between seeds and herbicides, and which drove the integration of Bayer and Monsanto [16, 17]. Other integrations have been driven by pressures brought about by investors. With the increasing financialisation of the food system, many food companies rely on equity for financing. Since shareholders attach great importance to the company's financial performance, to stabilize investors' investment and prevent them from withdrawing, companies need to adopt various methods to maintain good financial performance and high returns, among which company merger is one strategy [15]. For example, the merger of DuPont and Dow in 2015, which took place in the aftermath of the food crisis input company's declining profits, large investors in both companies wanted to merge to improve their financial performance. Ultimately, in 2017, they merged to become DowDuPont, the largest company in the chemical industry by market capitalisation [18].

Acquisition generally refers to the acquisition by a large corporation that takes over some small companies with development potential or high-quality resources, such as advanced technology and specific products, to consolidate its market position. For example, by acquiring a small food company with specific products, a large company can enter a specific market more easily and quickly, and through the existing resources and experience of the small company, it can take an advantageous position in commodity sales and marketing [19]. In 2019, PepsiCo acquired SodaStream, a company that produces home sparkling water dispensers that transform tap water into carbonated beverages, as a way of tapping into the market for healthier alternatives to carbonated beverages to meet the needs of a diverse range of consumers and unleash an environmentally friendly and sustainable corporate image [20].

2.3 Instrumental Power

Instrumental Power refers to the ability of food corporations to influence government policy-making through lobbying, political donations or involvement in industry organisations to maintain their control over the food system [21]. Large corporations, due to their greater power, often provide money or resources to government officials or candidates through lobbying and political donations to shape favourable regulations and trade agreements, such as loosening monopoly regulations and reducing trade access. Examples include the U.S. soda industry's lobbying actions against soda taxes and Coca-Cola's opposition to mandatory labelling of genetically modified organisms [22]. Smaller firms, on the other hand, often influence government policy indirectly by joining local groups and trade associations, joining forces to negotiate policies with the government, or organising petitions, as in the case of the Food Association in Yunnan Province, China, which actively cooperates with the government on food safety governance [23]. However, their impact is weaker than large corporations.

2.4 Respond to Market Demand

In order to maintain control of the food market, large food companies will flexibly adjust their products and services to meet consumer needs and preferences. Firstly, food production companies will provide diversified products to meet the needs of different consumer groups and make the company more competitive in the market [24]. For example, Kellogg's offers low-sugar cereals and chips for vegetarians. Secondly, restaurant companies will adopt personalised customisation to cater to consumers' preferences, such as McDonald's which provides customised hamburger services to its customers. Thirdly, food companies have responded positively to the current health and environmental protection trend by launching a range of products made from organic vegetables or with reduced use of additives [25]. This not only meets the needs of consumers pursuing these trends but also enhances the company's reputation and influence, and its position in the food system is more secure than before [26].

2.5 Manipulating Consumer Preferences

Many food companies use various methods to shape their customers' preferences and influence their purchasing decisions, thereby concentrating their market share and ultimately increasing their control over the food market. Typically, companies use advertising and promotional techniques such as celebrity-endorsed television commercials, attractive packaging designs, and buy-one-get-one-free offers to attract consumers' attention and motivate them to purchase [27]. Some companies also use the authority of experts or experimental data to influence consumers' purchasing choices, such as Coca-Cola's sponsorship of the International Life Sciences Institute (ILSI) to demonstrate that its products do not cause obesity [28]. In recent years, some processed food companies have added specific ingredients such as flavour enhancers and caffeine to create a unique taste of processed food, sometimes even addictive, making consumers loyal to the brand and consolidating their market share [29, 18].

2.6 Compression in the Upper Parts of the Supply Chain

The increasing concentration of companies in the food industry through horizontal consolidation has led to increasing pressure on the upper parts of the supply chain by large companies, and this control has helped large food companies to maximise their profits and strengthen their position in the food system [30, 31]. Firstly, large food companies use their high concentration or monopoly position to actively use their bargaining power to pass on costs to the upper part of the supply chain. The global division of labour brought by trade globalisation has made farmers in many regions more dependent on food companies for the sale of their agricultural products [32], so these companies will take advantage of low purchase prices to increase their profits and gain a price advantage, such as Walmart, which will adopt strict price requirements for farmers to pass on costs [33]. Large supermarkets will control suppliers' prices by charging shelf fees or threatening to remove items. Secondly, large companies also take away farmers' autonomy. They sometimes unilaterally change their purchasing policies in response to market demand, which often results in unanticipated losses for farmers, such as in 2016 when U.S. confectionery companies abandoned purchases of genetically modified sugar in response to demand from younger consumers, resulting in enormous losses for U.S. farmers who grow sugar beets [11]. Even if both sides have signed a purchase contract in advance, large companies will also skilfully use the contract terms to terminate the contract, leaving the farmers to bear the burden themselves.

3 Discussion

The strategy in the food industry has helped large firms to increase the concentration of corporate power and control of the food system. First, vertical integration has enabled large food companies to control from production to distribution, guaranteeing product quality and increasing production efficiency. However, it has also led to a significant reduction in farmers' bargaining power and risk tolerance, as well as a loss of their autonomy. As large food companies monopolise the market and control the supply chain, farmers are often forced to sell their produce at low prices and cannot decide what to grow [34]. Secondly, horizontal integration enhances large food companies' market share and technological complementarity, leading to consumer detriment. By monopolising the market, large food firms may manipulate market prices and product quality, leading consumers to pay higher prices or buy lower quality products. In addition, high levels of concentration pose more significant risks to public health; for example, the proliferation of concentrated animal feeding operations (CAFOs) in the livestock sector can lead to the spread of disease [11]. Further, the instrumental power used by large food companies to lobby governments and formulate policies in their favour may lead to policies that ignore the interests of small and medium-sized enterprises (SMEs) and consumers, violating social equity and justice. To address these drawbacks, the government and food companies should take multiple measures to solve the problem. First, the government should improve the anti-monopoly system, formulate a new anti-monopoly law, and adopt a transnational anti-monopoly approach to better deal with the monopoly phenomenon in the food industry [35]. Secondly, the government should strengthen production safety supervision in the food industry to reduce the risk of public health events. Finally, food companies should consciously fulfil their social responsibilities and promote a fairer food system.

4 Conclusion

In sum, driven by trade liberalisation, the increasing financialisation of the food system, and technological advances, food companies have used a range of strategies, including vertical integration, horizontal integration, instrumental power, and proactive response to market demands, in order to achieve higher profits and consolidate their market position. These strategies have helped large food companies to increase the centralisation of power and control in the food system, but they have also had many negative impacts on farmers, consumers and public health. Therefore, governments and food companies must work together to mitigate these negative impacts and build a fairer and more sustainable food system by improving antitrust laws, strengthening production safety regulations and promoting corporate social responsibility.

References

1. Magnan, A. Food regimes. When Wheat Was King, UBC Press, 2016: 6-21.
2. Friedmann, H. Feeding the Empire: The Pathologies of Globalized Agriculture. Empire Reloaded, edited by Panitch, 2005: 124-143.
3. Reardon, T., Timmer, C. P. The Economics of the Food System Revolution. Annual Review of Resource Economics, 2012, 4(1): 225-264.
4. Hendrickson, M., Howard, P. H., Constance, D. H. Power, Food and Agriculture: Implications for Farmers, Consumers and Communities. SSRN Electronic Journal, 2017.
5. Clapp, J., Fuchs, D. Agrifood corporations, Global Governance, and sustainability: A framework for analysis. Corporate Power in Global Agrifood Governance, 2009: 1-26.
6. Perry, M. K. Chapter 4 Vertical integration: Determinants and effects. 1989, 1.
7. Tree to table: Vertical Integration in the Food Industry. Shoreline Fruit, 2019.
8. De Schutter, O. International trade in agriculture and the right to food. Accounting for Hunger: The Right to Food in the Era of Globalization. O. De Schutter and K. Cordes. Oxford, Hart Publishing, 2011: 139-192.
9. Hawkes, C., Murphy, S. An overview of global food trade. Trade, Food, Diet and Health: Perspectives and Policy Options. C. Hawkes and et al., 2010: 16-32.
10. Palmer, M., Quinn, B. The strategic role of investment banks in the retailer Internationalisation Process. European Journal of Marketing, 2003, 37(10): 1391-1408.
11. IPES. Too big to feed. 2017.
12. Kelloway. Food and Power: Addressing monopolization in the US food system report. 2019.
13. Murphy, S., Burch, D., Clapp, J. Cereal Secrets: The World's Largest Grain Traders and Global Agriculture. Oxford, Oxfam International, 2012.
14. Luther, D. How does horizontal integration work? pros, cons and examples. Oracle NetSuite, 2023.
15. Clapp, J. The rise of big food and agriculture: Corporate influence in the food system. Edward Elgar Publishing Ltd., 2022.
16. Waltz, E. Bayer bids $66 billion for Monsanto. Nature Biotechnology, 2016, 34(10): 1003.
17. Zhiganova, L. P. Mergers and competition in seed and Agricultural Chemical Markets. Moscow Economic Journal, 2022, 7(12).
18. Clapp, J. Transnational Corporations. Food. Third Edition, Cambridge: Polity Press, 2020: 96-132.
19. Stewart, H., Martinez, S. Innovation by food companies key to growth and profitability. Food Review/National Food Review, 2002, 25(1): 28-32.
20. Bloomberg. PepsiCo buying sodastream in $3.2 billion merger deal. Time, 2018.
21. Clapp, J., Fuchs, D. Agrifood corporations, global governance, and sustainability: a framework for analysis. 2009.
22. Du, M., Tugendhaft, A., Erzse, A., Hofman, K. J. Sugar-Sweetened Beverage Taxes: Industry Response and Tactics. The Yale journal of biology and medicine, 2018, 91(2): 185-190.
23. Peng, X. Research on the Role of Food Industry Association in Yunnan Food Safety Governance. Yunnan University, 2013.

24. Diaz-Osborn, N., Osborn, S. Organizational structure and business and technology strategy of food companies to optimize development of foods for consumers with specific dietary needs. Developing Food Products for Consumers with Specific Dietary Needs, 2016: 43-62.
25. Fernández, J. A., et al. Current trends in organic vegetable crop production: Practices and Techniques. Horticulturae, 2022, 8(10): 893.
26. Stranieri, S., Ricci, E. C., Banterle, A. Convenience Food with environmentally-sustainable attributes: A consumer perspective. Appetite, 2017, 116: 11-20.
27. Wang, J., Cheng, Y., Chu, Y. Effect of celebrity endorsements on Consumer Purchase Intentions: Advertising Effect and advertising appeal as Mediators. Human Factors and Ergonomics in Manufacturing & Service Industries, 2012, 23(5): 357-367.
28. Iacobucci, G. Food and drink industry sought to influence scientists and academics, emails show. BMJ, 2020.
29. Badora, A., et al. Food additives in food products: A case study. Nutrition in Health and Disease - Our Challenges Now and Forthcoming Time, 2019.
30. Sexton, R. J., Xia, T. Increasing concentration in the agricultural supply chain: Implications for market power and sector performance. Annual Review of Resource Economics, 2018, 10(1): 229-251.
31. Clapp, J. The rise of financial investment and common ownership in global agrifood firms. Review of International Political Economy, 2019, 26(4): 604-629.
32. Cheshire, L., Woods, M. Globally engaged farmers as transnational actors: Navigating the landscape of Agri-Food Globalization. Geoforum, 2013, 44: 232-242.
33. Michelson, H., Reardon, T., Perez, F. Small farmers and big retail: Trade-offs of supplying supermarkets in Nicaragua. World Development, 2012, 40(2): 342-354.
34. Alderman, B. L., Blair, R. D. Vertical integration to avoid monopsonistic exploitation. Managerial and Decision Economics, 2022.
35. Zhang, Z., Wu, B. Governing China's administrative monopolies under the ANTI-MONOPOLY law: A Ten-Year review (2008-2018) and beyond. Journal of Competition Law & Economics, 2019, 15(1): 718-760.