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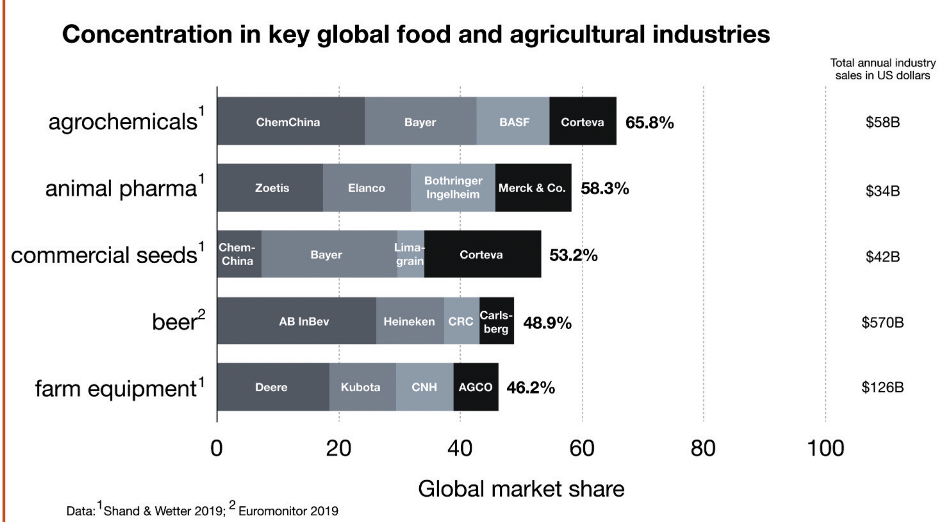
The state of concentration in global food and agriculture industries

In 2009 IAASTD suggested that "business as usual is no longer an option." In the decade since, however, business as usual has continued, and most food- and agriculture-related industries have become even more concentrated. The IAASTD noted that this trend is associated with numerous negative impacts, such as increased marginalization of farmer and rural livelihoods. Yet the market share held by the top four firms globally is 40 percent or higher in an increasing number of sectors, despite the fact that this concentration ratio once raised concerns for regulators when observed in much smaller regional and national markets.

In agrochemicals, for example, the top four combine for 65.8 percent of global sales, and for commercial seeds this figure is 53.2 percent. Notably, Bayer [Monsanto], ChemChina [Syngenta] and Corteva [DuPont and Dow] are among the top four in both of these sectors. Animal pharmaceuticals, beer and farm equipment also have global four-firm concentration ratios that exceed 40 percent.

Other industries are rapidly approaching these levels of dominance by large firms. The combined global market share of the top ten firms for sectors that



are more regionally concentrated include more than 50 percent for fertilizers, 18 percent for milk processors, and 10 percent for grocery retailers (Shand & Wetter 2019; IFCN 2019). In some nations the top 4 or fewer firms in key industries combine for more than 90 percent of sales (e.g. grocers in Australia; beer in Brazil, Mexico, Japan, South Africa and South Korea).

The top four agrochemical companies combine for 65.8 percent of global sales.

These figures may underestimate the power of dominant firms, particularly as asset management firms have increased ownership of multiple firms in the same sector in recent years, further reducing incentives to compete (Torshizi & Clapp 2019). Vanguard and BlackRock, for example, have investments in all of the leading firms in a number of food and agricultural industries, such as seeds, animal feed, dairy processing and meat processing.

Although these trends have been resisted, and alternatives had success in certain industries (e.g. organic food, craft brewers), the most successful of these are typically imitated or acquired by dominant firms (Howard 2017). This process may unintentionally open new avenues of growth for dominant firms, thus further reinforcing their power (Bichler & Nitzan 2017).

Policymakers have not only failed to respond to these trends, they have actively contributed to them – most have not sufficiently grasped that transnational agribusiness firms, particularly those emerging from North America and Europe, operate globally to find the cheapest inputs and to sell where they can make the most profit. National competition authorities are now inadequate to address consolidation across borders – those in the EU and the United States, for example, approved the acquisition of Monsanto by Bayer, forcing only limited divestitures. This *de facto* approved the merger globally, essentially forcing the hand of other competition authorities who may have considered other anti-competitive implications.

The top ten fertilizer companies have more than 50 percent of global market share.

In other regions, neo-mercantilist or state capitalism has emerged, with capital's interests even more closely aligned with national geopolitics (Belesky & Lawrence 2019). The governments of China and Brazil, for example, have encouraged food and agriculture firms headquartered in these nations (e.g. meat processors, grain traders, seed/pesticide firms) to expand globally via major acquisitions. Changes to regulations and court decisions have typically increased intellectual property protections and created more barriers to entry for smaller firms, which have subsequently been codified in international trade regimes.

A consolidating food system motivated either by profit or by state interests has failed to sustain farmer livelihoods, address food insecurity and hunger, or to ameliorate the ecological impacts of industrial food production. In fact, profit and return to shareholders has been prioritized over societal goals of equity, food security and resilience. When forced into global markets, farmers in every region are subsumed into a global intellectual property regime, giving up rights to save seed and to repair their equipment, and losing ownership of their own data. Constrained choices in consolidated markets (Hendrickson 2015) limit their ability to manage crops and livestock to enhance biodiversity (IPES-Food 2017). Opaque feedback loops means global consumers, especially affluent ones, have little understanding of food consumption's impact on farmers, rural communities or distant ecologies. In a consolidated global food system, the focus on productivity and shorter term thinking has created new risks just as humanity faces an unprecedented climate crisis (Nyström et al 2019).

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