



# **Executive summary**

The profits of the largest five agricultural commodity traders have increased to unprecedent levels in 2021 and 2022, and seem to remain excessively high in 2023. These profits have been realized during a period of increased food prices, and increased food price volatility. These extraordinary profits stand in stark contrast with the hunger suffered by millions of people worldwide and the cost-of-living crisis.

This research gives a detailed analysis of the realised profits by ADM, Bunge, Cargill, COFCO and Louis Dreyfuss Company, and unravels four key reasons that enabled these Big Five to thrive during the recent food crises. The first reason is the monopolistic position that they hold. They have control over the key export and import markets, dominate the global trade in key agricultural commodities and are an inherent factor to our global food supply chain.

Furthermore, they are not only competitors, but actually cooperate with each other on many occasions, and at different levels. This interconnectedness between agricultural commodity trading companies facilitates the structure through which higher prices are streamlined. Market power is closely tied to price-setting power in contexts where markets are highly concentrated and the noted interconnectedness can result in price setting, anti-competitive behaviour and cartel formation.

The third characteristic that enables large agricultural commodity traders to profit, is their control over the supply side. Through their large storage capacity, and their ability to take well-informed positions on the unregulated financial markets, the ABCCDs are able to influence and profit from unstable food systems.

The fourth reason is their vertical integration. Nowadays, agricultural commodity traders hold key positions throughout the entire food supply chain, from farm to fork. Their vertical integration is manifested through a vast network of contracted agricultural suppliers, storage, processing (crushing), and transportation in core strategic food–producing countries or regions. This puts the Big five in the position to obtain unique and valuable market information, and enables them to use this to their advantage.

Governments have to protect small-scale farmers and consumers and need to reverse the opaque, underregulated, and monopolistic position of these agricultural commodity traders in order to assure a secure and stable global food system.

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**CHAPTER 1** 

# An introduction to food commodity traders

In 2022, roughly one in ten people went to bed hungry.¹ Compared to 2021, the absolute number of people with hunger increased by 40 million.² According to the UN, the main drivers for this increase were conflict (mainly the Russian invasion of Ukraine), and the related disruption of global food supply chains and food price shocks.³

In the same period, 2021–2022, the profits of the largest companies that trade agricultural commodities like grain, corn, soy and sugar spiked. ADM, Bunge, Cargill, COFCO and Louis Dreyfus Company (ABCCD) notified their stakeholders that 2021 had been the most profitable year in the agricultural commodity traders' history.<sup>4</sup> Compared to the 2016–2020 period, 2021 net profits rose between 75 per cent and 260 per cent for all five agricultural commodity traders. In 2022 net profits doubled or even tripled compared to the 2016–2020 period.<sup>5</sup> Based on the publicly available quarterly finance reports, the net profits of the agricultural commodity traders remained excessively high during the first 9 months of 2023.<sup>6</sup>

Developing countries depend heavily on food imports. Even before the war in Ukraine, the global amount spent on the import of food was US\$ 268 billion higher than before the pandemic, with nearly two thirds of the increase concentrated in developing countries. The war in Ukraine has only deteriorated this problem. Within developing countries, the poorest 20 per cent spend over half of their income on food. In general, 10 million people are pushed into extreme poverty for every percentage point increase in food prices.<sup>7</sup>

Hungry for profits

Olivier de Schutter, the UN special rapporteur on extreme poverty and human rights commented on this disparity between increased hunger on the one hand and increased profits for the companies that trade food on the other hand. He stated that:

"The fact that global commodity giants are making record profits at a time when hunger is rising is clearly unjust, and is a terrible indictment of our food systems. What's even worse, these companies could have done more to prevent the hunger crisis in the first place."

In this paper, we look closely at the 'Big Five' in agricultural commodity trading. We describe in detail the operations of the individual companies and their position in global value chains. Furthermore, an analysis will be provided with regard to the dominant position they hold as a group. Despite the fact that they are to some extent competitors, they also work together closely in many ways. We will argue that, together, they hold a monopolistic position on the global market.

In the first chapter, we describe the global market for agricultural commodities and the role the five biggest companies play in this sector and in the global value chain. In chapter 2, we describe the mechanisms that enable ABCCD to profit from food crises. We also detail how they collaborate in joint ventures on technical innovation and infrastructure. In the annex, we provide a detailed overview of the five individual companies.

# A brief overview of the five agricultural commodity traders

As can be observed in the table below, Cargill is the largest among the agricultural commodity traders, in terms of revenue, profits and employees. Following profits and revenue, ADM is the second largest, while COFCO comes in second based on trading volume and the number of employees. In order of magnitude (revenue, profits and employees) they are followed by Bunge and LDC.

	Archer Daniels Midland (ADM)	Bunge	Cargill	COFCO	Louis Dreyfus Company (LDC)
Revenue, US\$, Million (2022)	101,556°	67,232 <sup>10</sup>	165,000*11	108,28612	59,93113
Net profits, US\$, Million (2022)	4,36514	1,6781⁵	6,680*16	3,38417	1,00718
Trade volume (million tons)	60 <sup>20</sup>	14221	217 <sup>22</sup>	180 <sup>23</sup>	83 <sup>24</sup>
Employees	42,00025	23,00026	155,000 <sup>27</sup>	151,000 <sup>28</sup>	17,667 <sup>29</sup>
Headquarters	United States <sup>30</sup>	United States/ Bermuda³1	United States <sup>32</sup>	China <sup>33</sup>	Netherlands <sup>34</sup>
Ownership	Public	Public	Private	State-owned	Private

<sup>\*</sup>For the fiscal year beginning June 1, 2021 and ending May 31, 2022.

# What makes the Big Five different from other agricultural commodity traders?

There are many agricultural commodity traders in the world. The reason they are not included in this analysis is because of their size (for example Agrocorp)<sup>35</sup>, because of a lack of agricultural commodity diversification (for example Golden Agri-Resources<sup>36</sup> or Musim Mas<sup>37</sup>), lack of global presence (Amaggi<sup>38</sup>) or a combination thereof.

Smaller traders like Olam and Wilmar focus more on specific commodities. Wilmar, for example, has its key agricultural focus on sugarcane and palm oil.<sup>39</sup> Olam trades predominantly in cocoa, coffee, cotton and rice<sup>40</sup>, these companies also mainly focus on certain regions. Wilmar on Asia (more than 70 per cent of its revenue is sourced from South East Asia and China)<sup>41</sup>, and Olam on Asia, the Middle East and Australia.<sup>42</sup>

In this report, the focus is on companies with high levels of vertical integration, a worldwide scope and global market power which enables them to make decisions that affect communities and economies worldwide. The ABCCD companies have a strongly diversified business model (focusing both on grains, oilseeds and other key commodities such as coffee and palm oil) combined with a supplier network that dominates the main agricultural export markets.

#### The Big Five in agricultural commodity trading

There are five large multinationals that dominate the agricultural value chain: Archer Daniels Midland (ADM), Bunge, Cargill, China Oil and Foodstuffs Corporation (COFCO) and Louis Dreyfus Company (LDC), collectively referred to as the ABCCDs. They connect farmers with customers or to put it in their public relations style: they dominate the value chain "from farm to fork".<sup>43</sup>

Although most agricultural products are traded within domestic markets, ABCCDs fulfil a key function in connecting countries. They link surplus production markets with countries that fall short in domestic food production.<sup>44</sup> The five ABCCD companies are generally referred to as 'food commodity traders', but this conceals the fact that animal feed and biofuels are an important part of their trade. It would be better to refer to these companies as 'agricultural commodity traders'.

Agricultural commodity traders traditionally focus on grains (wheat, maize, rice, and corn), oilseeds (palm kernel and soybean), and others (sugar, juice, cocoa, coffee and cotton).<sup>45</sup> Over the last few decades, they have come to dominate the global trade in these food stuffs. With regard to grains, for example, four of the five companies dominate 70 to 90 per cent of the international trade volume.<sup>46</sup>

Some countries depend on imported food and therefore have to rely heavily on agricultural commodity traders. Somalia, for example, sourced more than 90 per cent of its grains from Ukraine and Russia before the Russian invasion in Ukraine.<sup>47</sup> A lot of African countries, as well as most Arab countries, are almost fully dependent on food

imports. Regions that traditionally have surplus production are Latin America, Eastern Europe, South-East Asia, Oceania and Canada.<sup>48</sup> The most important role of agricultural commodity traders, simply stated, is to connect supply with demand, on a global scale.<sup>49</sup>

When it comes to grains and oilseeds combined, the ABCCD companies move around 550 million tonnes (73 per cent of the total global trade in grains and oilseeds of about 750 million metric tonnes). <sup>50</sup> Cargill alone is responsible for handling 25 per cent of all the grains and soybeans produced by US farmers. <sup>51</sup>

The main agricultural market for the global supply of soy, Latin America, is also dominated by the ABCCDs. For the largest soy exporting countries (Brazil, Argentina and Paraguay) over half of all soy exports are routed via the ABCCDs.<sup>52</sup> Also the Brazilian-Chinese<sup>53</sup> soy trade is dominated by the ABCD (excluding COFCO) companies,<sup>54</sup> that control 47 per cent of export and 37 per cent of import trade value.<sup>55</sup>

With regard to Europe, the traders' dominance comes to the forefront in relation to the import or soy. Bunge and Cargill alone are responsible for more than 30 per cent of all Brazil–EU soy exports and dominate the French soy bean meal market.<sup>56</sup> With regard to soy used for animal feed, Bunge is the main supplier of soy for the meat industry in the European Union (EU).<sup>57</sup> Bunge alone is responsible for more than one fourth of all soybean meal and crude soybean oil sales in the European Economic Area. It furthermore has a clear monopolistic position in some markets, as Bunge is for example responsible for 90–100 per cent of crude soybean oil sales in Portugal.<sup>58</sup> ADM, in turn, operates the largest oilseed processing and refining complex in Europe.<sup>59</sup>

This high degree of concentration together with an important control over a large share of the world's most important agricultural commodities gives these firms enormous bargaining power to mould our international food landscape.

#### More than trade

Trade in agricultural commodities (including processing, storing and transporting these commodities) is key to all five agricultural commodity traders, and make up an essential part of their business model. At the same time, all five multinationals have diversified their business over the past decades. Cargill, for example, has invested heavily in the animal nutrition (feed) and meat sectors<sup>60</sup>, while ADM and Bunge are important producers and suppliers of biofuels and fertilizers.<sup>61</sup> COFCO has an important real estate division<sup>62</sup>, and Louis Dreyfus Company produces pharmaceuticals and cosmetics.<sup>63</sup>

Agricultural commodity traders have also expanded their activities throughout the entire value chain and have become strongly integrated vertically. Each of the five commodity traders hold at least 100,000 hectares of land, about the size of Iceland. <sup>64</sup> Their combined landholdings comprise about one million hectares, more than the total size of all arable land of the Netherlands. <sup>65</sup>

The core business of agricultural commodity traders is more sophisticated than merely the buying and selling of agricultural commodities. They hold their powerful position in the food supply chain due to a vast network of contracted agricultural suppliers, storage, processing (crushing), and transportation in core strategic food–producing countries or regions. Brazil, for example, is the largest soybean exporter worldwide (it accounts for 49 per cent of total worldwide soybeans export)<sup>66</sup> and is also expected to become the largest corn exporter worldwide.<sup>67</sup> Bunge, Cargill, Louis Dreyfus Company, COFCO, Marubeni<sup>68</sup> and ADM all have an important stake in the Brazilian soy exports.<sup>69</sup> With regard to corn, the key traders are Bunge, Cargill, ADM, Louis Dreyfus Company, Amaggi<sup>70</sup>, Gavilon<sup>71</sup> and COFCO.<sup>72</sup>

These companies own important infrastructural assets in Brazil such as ports, rail-ways, refineries, silos, mills and factories. Bunge, for example, owns 62 grain storage silos (elevators), 9 grain mills, 8 crushing facilities, 6 ports, 6 refineries and 4 oil packaging factories.<sup>73</sup> These assets had a combined value of US\$ 545 million in 2022.<sup>74</sup>

Cargill states that it "spans all production phases, from the field to post-consumption, including food security".<sup>75</sup> The Chinese company COFCO also has a strong vertical integration. It owns pig farms, it imports the feed, owns the slaughterhouses that process these pigs and sells the meat through its household brands ("Joycome" and "Maverick").<sup>76</sup> The development of stronger vertical integration has also prompted these trading houses to adapt to changes in the behaviour of consumers. LDC, Cargill and ADM, for example, have recently invested in plant-based meat substitutes.<sup>77</sup>

Illustrative for their powerful position in the food supply chain is also their relationship to individual farmers. Most agricultural commodity traders seem to have programs in developing countries through which they advance capital and other financing arrangements to farmers.<sup>78</sup> For example, Bunge's prepaid commodity purchase contracts and advances have, in Brazil alone, a total value of US\$ 651 million (2022).<sup>79</sup>

Their size and the very strong vertical integration are a strong indication of the monopolistic position these agricultural commodity trading companies hold in certain parts of the world, over specific sectors or over the trade in specific crops, like soy or grain. It is extremely difficult for external actors to compete on a level playing field with these large traders. Newcomers to the agricultural commodity trade, such as COFCO, have only been able to secure a position by taking over other agricultural commodity traders (which already had a strong physical presence in the key agricultural markets), and by focusing on a very specific market.<sup>80</sup> In the words of former Cargill trader and publicist Jonathan Kingsman: "Glencore Agriculture [previous name of Viterra]<sup>81</sup> and COFCO International<sup>82</sup> are the new kids on the block; both have had to find room on an already crowded street".<sup>83</sup> Barriers of entry to newcomers are a strong sign of market power.<sup>84</sup>

The big five agricultural commodity traders supply other large multinational (food-processing) companies. Cargill, for example, supplies Ahold Delhaize, McDonald's, Walmart, Sysco, 85 Unilever, Nestlé 86, and ALDI 87; ADM supplies Mark & Spencer 88.

Other large customers are states. For example, in the summer of 2022, Cargill concluded a deal with the government of Pakistan for 500,000 tons of wheat (worth US\$ 220 million). In some cases food security is such an important issue that states or state-owned companies directly invest in agricultural commodity traders. The United Arab Emirates (UAE) state-owned company ADQ recently bought a 45 per cent stake in Louis Dreyfus Company. Included in the deal is a long-term supply agreement to sell agricultural commodities to the United Arab Emirates.

Although the business models of agricultural commodity traders have much in common, their corporate identities differ. Of the five companies, only ADM and Bunge are publicly owned. Cargill and LDC, on the other hand, are privately owned. However, as mentioned above, the UAE has an important stake in the latter. COFCO is the only one that is completely state-owned. That is however not the case for all of its subsidiaries. COFCO's international agricultural commodity trading division (COFCO International), although majority owned by the COFCO group (60 per cent stake), is partially owned by Standard Chartered Bank, China Investment Corporation, Hopu Investment Management, and the International Finance Corporation of the World Bank.

The corporate identity impacts the economic and geopolitical goals of the agricultural commodity traders. While the focus of a publicly-owned company, by nature, is on maximizing shareholder value<sup>95</sup>, private companies have the ability to reinvest a larger part of their profits, ensuring a more stable and long-term future.<sup>96</sup> State-owned companies, however, do not only have economic goals but also serve as a means for the government to reach geopolitical goals, for example, with regard to food security.<sup>97</sup>

#### Socio-environmental impact and deforestation

Around 90 per cent of global deforestation is driven by agricultural expansion. This includes agricultural production of food commodities in which the ABCCD traders are active, such as soy, cocoa, palm oil and cattle farming. Deforestation, for example, in the Amazon or the Brazilian Cerrado region, is often the result of increased demand for soy production, which in turn is driven by the growing demand for animal feed due to meat production.

According to Mighty Earth's Soy & Cattle Deforestation Tracker, Bunge, Cargill, COFCO, ADM and LDC are collectively responsible for at least 161,018 hectares of forest clearance in their soy and cattle supply chains between March 2019 and March 2021 alone. This is equivalent to the size of over 225,000 football fields. Deforestation has disastrous impacts on biodiversity, but is also a driver of around 10 per cent of global warming and threatens the livelihoods of millions of people that rely on forests for their living, or as their homes. 101

The alarming social and ecological footprint of agricultural commodity traders, ranging from climate change and deforestation to human rights violations, can be observed across all regions and food chains where the ABCCD are active. <sup>102</sup> Worldwide, the food system is responsible for one-third of global emissions, yet agricultural commodity traders are largely failing to address their contributions to climate change. <sup>103</sup>

Despite the controversies stacking up, the traders have largely escaped widespread public scrutiny. Even so, pressure on agricultural commodity traders to put an end to human rights abuses and environmental destruction has been mounting, often through household brands like Nestlé and Unilever that, under the pressure of civil society campaigning, have increasingly adopted human rights and environmental due diligence processes to mitigate negative impacts.<sup>104</sup>

Still, agricultural commodity traders continue to perform poorly on implementing social and environmental sustainability policies and practices. They have taken insufficient steps to contribute to just and sustainable food supply chains, and traders perform particularly poorly on transparency as the sector remains opaque and largely unresponsive to transparency and accountability demands.<sup>105</sup>

#### **CHAPTER 2**

# Profiting from crises

All of the five agricultural commodity traders of the ABCCD have witnessed historic high profits during the 2021–2022 period. This chapter analyses these increased net profits in relation to the five years leading up to the current food crisis. We also analyse the power position of the ABCCDs in the food supply chain and the structural elements behind the excessive profiteering.

(in million US\$)	ADM <sup>106</sup>	Bunge <sup>107</sup>	Cargill <sup>108</sup>	COFCO	LDC <sup>109</sup>	Total
2016	1,288	776	2,380	865 <sup>110</sup>	306	5,615
2017	1,223	207	2,840	1,746 <sup>111</sup>	316	6,332
2018	1,782	236	3,186	1,800112	366	7,340
2019	1,418	-1,302	2,560	1,823113	228	4,727
2020	1,774	1,165	3,000	3,233114	383	9,555
2021	2,731	2,167	4,920	3,600115	697	14,115
2022	4,365	1,678	6,690	3,384116	1,007	17,123

Figure 1.. Development of ABCCDs net profits for the period 2016-2022.

**Hungry for profits** 

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### Development of ABCCDs net profits for the period 2016-2022 in million US\$

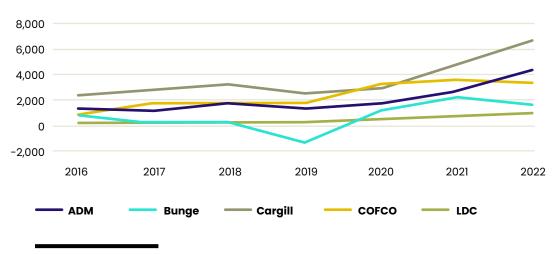
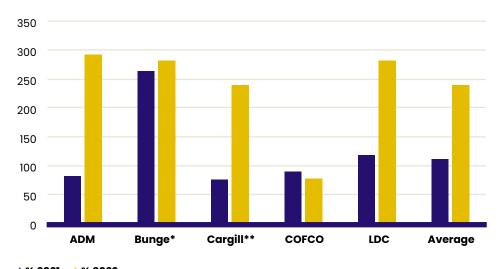


Figure 2. Visualization of figure 1.

If we regard the 2016–2020 period, in which food prices were relatively stable, net profits in 2021 rose between 75% and 260% for all agricultural commodity traders compared to the bench mark period 2016–2020. In 2022, net profits were 200% to 300% higher compared to that period.<sup>117</sup>

### Increase of 2021 & 2022 net profits compared to average 2016-2020 net profits in %



**↑** % 2021 **↑** % 2022

\*Excluding financial loss year 2019

\*\*Fiscal year ends May

Figure 3..<sup>118</sup>

The exceptional profitability of the agricultural commodity traders is not only visible through the realized net profits. Another indicator of profitability is the so-called net margin. The net margin is calculated on basis of the net profit and the realized revenues. The margin indicates how much each dollar generated by the company in revenue translates into net profit. In other words, a net profit margin of 1 indicates that on average, with regard to every US\$ 100 of revenue about US\$ 1 in net profit is realized. As stated by the Corporate Finance Institute:

# "A high net profit margin means that a company is able to effectively control its costs and/or provide goods or services at a price significantly higher than its costs". 119

Generally, food commodity traders operate in a sector with limited margins.<sup>120</sup>
Nonetheless, all agricultural commodity trading company realized a much higher net profit margin for the years 2021–2022 as compared to the preceding years (see table 4 below). Some more than doubled their net profit margin (for example ADM and Cargill). This indicates that the increased profitability of the traders has not been derived from expanding their business, but mainly through either decreasing their costs, increasing the prices they ask for their agricultural commodities or a combination of both. Given the strong increase in agricultural commodity prices, it is most likely that the companies have been able to benefit from higher food prices without suffering from an equivalent rise in food and other input/production prices (such as the cost of fertilizers, costs of transport et cetera) on the cost side.

Net Margin (%)	2016	2017	2018	2019	2020	2021	2022
ADM	2.1%	2.0%	2.8%	2.2%	2.8%	3.2%	4.3%
Bunge	1.8%	0.5%	0.5%	-3.2%	2.8%	3.7%	2.5%
Cargill <sup>121</sup>	2.2%	2.6%	2.8%	2.3%	2.6%	3.7%	4.1%
COFCO	0.8%	1.5%	1.9%	1.7%	2.9%	2.4%	2.2%
LDC	0.8%	0.8%	1.0%	0.7%	1.1%	1.4%	1.7%
Average	1.50%	1.44%	1.78%	1.74%122	2.44%	2.88%	2.96%

Figure 4. Agricultural commodity traders - net profit margin<sup>123</sup>

# The reason agricultural commodity traders profit during a food crisis

The high profits have a clear link with agricultural commodity prices. These have increased substantially since 2021, especially due to the reaction of the futures market, where prices are being set, in relation to the Russian invasion of Ukraine.<sup>124</sup> The price of wheat rose close to 50 per cent in the two weeks following the Russian invasion of Ukraine (22 February 2021 to 8 March 2021), followed by palm oil (close to 25 per cent), corn (10 per cent), and soybean oil (10 per cent).<sup>125</sup>

#### **Evolution of food prices versus total ABCCD profits**

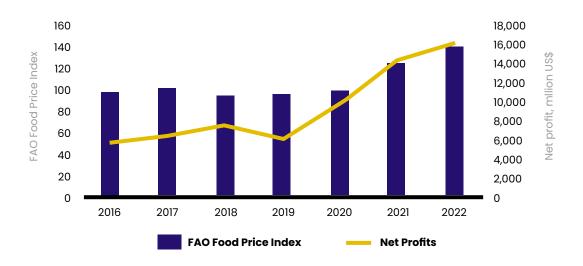


Figure 5.126

In the chart above, both the evolution of food prices as well as the average net profits of the food commodity traders is depicted. As can be observed, both follow an almost identical trend. From the onset of 2020, both increase strongly, indicating a possible correlation between the two observations. Most of the food commodity traders explain the ballooning profits by non-specific remarks such as "strong demand", "tight supplies" or "high prices". Some food commodity traders have, however, been more specific in their explanations. Viterra, for example, noted that "supply chain disruptions" and "market volatility" resulted in Viterra's most successful year. 128

Food prices and food price volatility play a big role in the enormous increase in profits. <sup>129</sup> But higher prices are not the only explanation for the steep rise in profits witnessed in the agricultural commodity trade, as will be explained below. So why do higher food prices and increased food price volatility result in extraordinarily high profits for agricultural commodity traders? And do agricultural commodity traders profit passively from increased food prices and related food price volatility, or do they have an active hand in shaping the circumstances they profit from?

We have identified four key reasons why ABCCD agricultural commodity traders are in a position to thrive from higher agricultural commodity prices and increased agricultural commodity price volatility.

#### 1) Oligopoly

The first mechanism through which agricultural commodity traders propser during food crises, is the oligopolistic structure of the market in which they operate. An oligopoly is described by the Federal Reserve Bank of St. Louis as: "a market in which a few large firms dominate. Barriers prevent entry to the market, and there are few close substitutes for the product." Two aspects play a crucial role in this: dominant market position and market consolidation.

#### A) Dominant market position

The ABCCD as a group dominate the global food trade, both in terms of imports and exports. The Big Five control between 70 and 90 per cent of the global trade in commercial grains.<sup>131</sup> Furthermore, they exert a high level of control on the main export markets of soy (Brazil, the United States, Paraguay and Argentina).<sup>132</sup> For example, ABCCD traded 53 per cent of all soy exported from Argentina, Brazil and Paraguay (2018).<sup>133</sup>

The 2022 Trade and Development report by UNCTAD highlights how the ability of agricultural commodity traders to profit from market volatility is largely attributable to their complex corporate structures and the use of unregulated financial tools.<sup>134</sup> The report highlights that "[e]nergy and food markets are complex, highly concentrated, and prone to anti-competitive practices such as abuse of market power by dominant firms or oligopolistic price fixing, which can cause higher prices and lower service".<sup>135</sup> They furthermore argue that the high profits, as realized by the agricultural commodity traders during 2021-2022, are partially explained by profiteering.<sup>136</sup>

According to a study by insurance company Allianz, up to 20 per cent of food inflation can be attributed to profiteering. <sup>137</sup> Profiteering for agricultural commodity trading companies is even higher than for oil companies, due to more predominant concentration. <sup>138</sup> Other forms of control over supply chains include information asymmetries, where speculation is enabled by the companies holding perfect or almost perfect information, which leads to transparency issues towards customers who hold imperfect information.

#### B) Market consolidation (mergers and acquisitions)

One of the strategies to increase market concentration and to consolidate an oligopolistic market structure, is through mergers and acquisitions.<sup>139</sup> And there have been many mergers and acquisitions throughout the last decades by the ABCCDs.<sup>140</sup> Although the deals have been scrutinized, for example, by the competition regulators of the EU, the agricultural commodity trade market has become more and more concentrated. The EU competition regulators have assessed a total of 60 cases of mergers

and acquisitions related to the ABCCDs since 1990. $^{141}$  All but one have been approved unconditionally. $^{142}$ 

The next big merger coming up, is the merger between Viterra and Bunge, in a stock and cash transaction. The deal is unprecedented in size in the global agriculture sector and will move the new company closer to the size of ADM and Cargill.<sup>143</sup> It will further strengthen the ABCCD's dominant market position.

The fact that policy makers have allowed the creation of an oligopoly within the agricultural commodity trading sector demonstrates the narrow prism of antitrust regulators. There is a lack of monitoring of agricultural commodity traders on a global level, something which was also noticed by Abdolreza Abbassian, former senior economist at the UN's Food and Agriculture Organization.<sup>144</sup>

#### 2) Interconnectedness

The five agricultural commodity traders compete with each other for market shares in certain regions, they focus on the same commodities and serve, to some extent, the same customers. At the same time, they also operate as business partners, for example, through joint ventures, joint investments and industry-wide cooperation, as will be showcased below.

There are many joint ventures between ADM, Bunge, Cargill and Louis Dreyfus Company. ADM has a joint venture with Cargill called SoyVenTM. This joint venture is located in Egypt and supplies the Egyptian market with soybean oil and meal. Although the main factory, the soy crush facility, is located in Borg Al-Arab in Egypt, the company is managed from Switzerland. ADM and Cargill have also cooperated through their joint venture Grainbridge LLC. The key purpose of this joint venture is to: create a digital platform that enables North American farmers to consolidate information on production economics and grain marketing activities. Although the joint venture was established in 2019, it was already sold in 2021.

Bunge and LDC also have important stakes in the joint venture Complejo Agroindustrial Angostura S.A. (CAIASA). This joint venture, registered in Paraguay, is an oilseed processing factory. The 2022 Annual Report of LDC also lists joint ventures between Cargill and Louis Dreyfus Company in port terminals for grain export (Terminal Exportador de Santos and Terminal Exportador do Guarujá), and sugar export (Terminal de Exportação de Açúcar do Guarujá). 150

Next to joint ventures, ADM and Cargill also have joint investments. One example is the French biotechnology company InnovaFeed SAS. Both ADM and Cargill have a strategic investment in this company<sup>151</sup> and are currently developing joint projects.<sup>152</sup> Another example is the Paraguayan company Complejo Agroindustrial Angostura S.A. (CAIASA). Both Bunge and ADM hold a minority stake (33.33 per cent) in this company, together with the Argentinean company Aceitera General Deheza S.A..<sup>153</sup>

The ABCCDs also work together closely in developing and adopting new technologies, like blockchain technology. 154 All ABCCD companies have a stake in the blockchain platform Covantis, which was legally registered as a company in 2020 and is incorporated in Switzerland. 155 Initially, Viterra was the only non-ABCCD member of the Covantis Platform. The goal of the platform is to improve communication between agricultural commodity traders in order to improve logistic processes. The project was initially launched in Brazil but has already been rolled out in other key agricultural markets, such as Argentina, Uruguay and the United States. 156 A similar project was recently launched in Ukraine. 157

Another example of cooperation is the railway project that the agricultural commodity traders have been establishing in Mato Grosso, Brazil's agricultural heart. Currently, the transportation of grains and oilseeds is being undertaken via vulnerable roadway infrastructure, which hampers efficient transportation. Some agricultural commodity traders, therefore, want to create a thousand-kilometre-long railway (Ferrogrão<sup>158</sup>). This project is highly contested. The companies that initiated feasibility studies for this railway are ADM, Bunge, Cargill, Louis Dreyfus Company and the Brazilian company Amaggi Group. Group. 160

There are more examples. The food commodity traders Louis Dreyfus Company, ADM, Cargill, Amaggi together with Dalablog created the joint venture Strada in 2023, formed from the merger of logistics company Carguero and payments company Tip Bank, with the goal to create a digital truck transportation marketplace platform and provide the market with electronic payment services related to these activities. The creation of the joint venture was initially appealed by the confederation of self-employed truck driver unions (CNTA). Nonetheless, the Brazilian government (through the antitrust CADE Tribunal) unconditionally cleared and approved the transaction in February 2023. 161

The interconnectedness between agricultural commodity trading companies facilitates the structure through which higher prices are streamlined. Market power is closely tied to price-setting power in contexts where markets are highly concentrated<sup>162</sup> and the noted interconnectedness can result in price setting, anti-competitive behaviour and cartel formation, even though it is difficult to research to what extent this interconnectedness of the agricultural commodity traders results in higher or excessive profits.

Nonetheless, most ABCCDs have, over the past years, been accused and found guilty of anti-competitive behaviour. ADM, for example, was accused of price-fixing in the peanuts sector, and paid a settlement of US\$ 5 million in 2021. Hos Bunge has been under investigation since March 2023 by the Romanian authorities concerning possible collusion on the sunflower oil market. It was noted by the president of the Romanian Competition Council that "we have suspicions that some producers have taken advantage of the current economic context (high inflation) and have agreed to further increase the selling prices for some products, thus obtaining higher, undeserved profits". Hos

Cargill was also accused, in 2022, of violating antitrust law by improperly communicating with other companies in the poultry sector about worker wages and benefits. Cargill, together with the other two companies, negotiated with the US Justice Department and ultimately settled to pay US\$ 84.4 million to resolve the allegations. In 2019, Cargill has also been accused of conspiring (with Tyson Foods, JBS and National Beef) to: "suppress the number of cattle slaughtered to help drive up the price of beef". In 2020 already led to a settlement by Tyson (for US\$ 25 million), while the others are still in limbo. In Cargill has furthermore been accused of price fixing in both South Korea and the US.

Louis Dreyfus Company is currently facing, along with Citrosuco and Cutrale, a 12.7 billion Brazilian Real (US\$ 2.5 billion) class action lawsuit in Brazil over an alleged orange juice price–fixing scheme.<sup>170</sup> COFCO was targeted by the US Commodity Futures Trading Commission (CFTC) in 2022. The regulator stated that "between April 22 and May 1, 2020, Chinatex traders engaged in wash trading in order to liquidate a long position in the account of an affiliated company and re–establish the position in its own account, to the ultimate benefit of its parent company, COFCO".<sup>171</sup>

Considering the strong and dominant market power of the agricultural commodity traders and their clear track record with regard to anti-competitive behaviour, the potential correlation with the recent extraordinary profits is not to be underestimated. The latest work by academics indicates that the increases in companies' profits of the last few years can be linked to the current levels of inflation. Monopolistic companies (such as the ABCCDs) may use sector-wide cost shocks and supply chain bottlenecks to implicitly coordinate price hikes. Due to these shocks and bottlenecks and the related narrative of broken supply chains and exploding energy prices (as observed with the Russian invasion of Ukraine), customers are more willing to pay higher prices, as they perceive these price hikes as legitimate. 173

Price hikes do not always need to be coordinated through a formal cartel and norms of price leadership. Implicit agreement, for example, by incorporating specific language in external communication, can be a way to coordinate price hikes. The public discourse, used by companies, to create seller-induced inflation is well documented by the Groundwork Collaborative.<sup>174</sup>

Another way to implicitly coordinate price hikes, is the companies' focus on profit margins. Again, with cost shocks and supply chain bottlenecks, companies anticipate by increasing prices to protect their margins. Knowing that other firms also pursue the same goal (to aim for stable profit margins) they can safely increase prices knowing that other firms will have to follow suit. Research has shown that this is generally initialized by the most powerful companies in the sector, through so-called 'price-leadership'.<sup>175</sup>

#### 3) The ability to influence food availability

A third identified channel through which agricultural commodity traders can actively profit during food crises (with increased food price volatility) is their ability to influence the availability of food. As noted before, agricultural commodity traders control an important stake in the global agricultural trade markets. Through their size, ABCCDs are in the position to influence the amount of food that is supplied. An important aspect in that regard is their storage capacity. Each agricultural commodity trader owns facilities to store food, for example, grain and oilseed elevators, warehouses and terminals, as noted before.

Storage of food has an important role in securing a sufficient and constant food supply. Global food grain storage has increased over the past years, going from 600 million tons in 2012, to close to 900 million tons in 2020.<sup>176</sup> Most grain storage is being held by national governments. For example, China currently stockpiles almost half of the global grain stocks (with a total storing capacity of 700 million tons), to secure the availability of sufficient food for its population.<sup>177</sup> Storage, however, can also be used as 'speculative storage'. Although difficult to research, there have been attempts to demonstrate that speculative storage could explain a substantial part of the recent food price rise.<sup>178</sup>

This was also noted in the 2022 special report from the International Panel of Experts on Sustainable Food Systems (IPES). They showcased that agricultural commodity traders hold significant grain reserves and create an incentive for these traders to "hold stocks back until prices are perceived to have peaked". IPES further notes that "the stockholders (e.g. private traders) might be reluctant to disclose their positions to competitors, which weakens the reliability of their information". 179

To provide a comparison, the whole continent of Africa's food shortage, following the war in Ukraine, the recent food price increase, and following the covid-pandemic, is almost similar to COFCO's storage capacity: about 30 million metric tons. The combined storage capacity of ADM, Bunge and COFCO (around 68 million tons, see table below) is similar to the total annual wheat consumption of the United States, Turkey and the United Kingdom combined. The continuation of the United States, Turkey and the United Kingdom combined.

#### Total storage capacity in 1,000s metric tons<sup>182</sup>

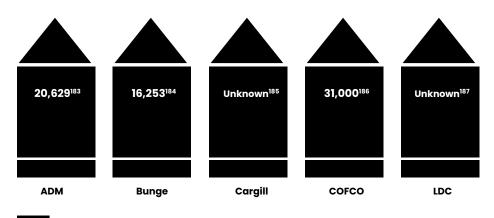


Figure 6.

There is no obligation for the agricultural commodity traders to disclose how much food they have stored in their facilities. It is therefore impossible to tell whether the agricultural commodity traders have increased the total volume of stored food products, in order to cash in later on higher global food prices. Publicly traded companies, such as ADM and Bunge, do however disclose the value of their inventories on their balance sheets. The privately–owned Louis Dreyfus Company does also publish this information in its annual reports.

To compensate for the absence of data from Cargill and COFCO we have decided to include data from the publicly traded companies Wilmar, Olam and Viterra. We analysed the evolution of inventory (in terms of monetary value) throughout the 2016–2022 period. We can observe that all agricultural commodity traders have reported higher inventory value for both 2021 and 2022 as compared to the 2016–2020 period. The average inventory value, compared to 2016–2020, was on average 47.26 per cent higher in 2021 and 50.05 per cent higher in 2022.

Million, US\$	2022	2021	2020	2019	2018	2017	2016
ADM	14,771	14,481	11,713	9,170	8,813	9,173	8,831
BUNGE	8,408	8,431	7,172	5,038	5,871	5,074	4,773
LDC	6,066	7,563	6,101	5,143	4,940	4,833	6,165
WILMAR	13,231	11,739	9,436	7,970	7,911	8,224	7,022
OLAM	8,947	8,857	7,381	7,211	6,468	6,045	7,414
Viterra	9,111	8,340	5,635	4,322	4,160	2,865	n.a.
Total	60,534	59,411	47,438	38,854	38,163	36,214	34,205

Figure 7. Value of inventories of agricultural commodity traders (excluding Cargill and COFCO).

Remarkably, it appears from the analysis above that agricultural commodity traders increased their inventories during the recent food crisis. Due to the limited information available (we only have information for some companies, and only have year-on-year data from the annual report) it is difficult to draw unambiguous conclusions. This sudden and remarkable increase could suggests that the agricultural commodity traders might actually have stockpiled their commodities during the recent food crisis to await higher prices. However, there is one caveat that should be taken into consideration: the value of inventories reported by the companies is based upon current market prices, instead of volume. Part of the increase in the value of the inventories could be explained by the general rise in agricultural commodity prices. Currently companies do not have to report on their inventory (neither with regard to volume nor type of commodities conserved). More detailed and regularly updated information, for example, with regard to the total amount of commodities stored by agricultural commodity traders, would make it possible to closely monitor the speculative storage behaviour of the traders.

#### Inventories (value) in billions US\$

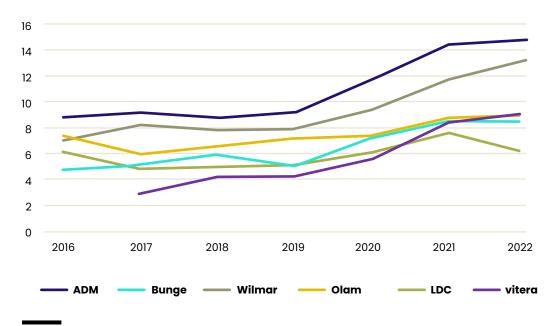


Figure 8.194

Agricultural commodity traders do not only influence food prices through speculative storage. They also influence food prices through their participation on the agricultural commodity derivatives markets, where prices are set through trading of food commodity derivatives contracts (futures and options). These derivatives markets are used to secure fixed prices in the future for commodity producers and buyers, called hedging. Speculation means non-hedging by (financial) players who aim to make some profits by buying and selling derivatives contracts, which can positively contribute to the smooth trading in agricultural commodities. Whenever speculation becomes excessive, especially by financial players, it can result in more and higher food spikes and increased price volatility. However, big agricultural traders can also engage in non-hedging speculative trading on commodity derivatives markets. So far this has not been sufficiently researched.

It has been acknowledged by many experts that excessive speculation on food prices can have an inflating effect on prices, or can cause a sudden drop in prices (after excessive speculation). Rabobank, a well-known globally operating agricultural bank, notes that 'speculative appetite' is one of the four major factors driving the current surge in prices across agricultural commodities.<sup>197</sup> One way to make a distinction between 'normal' speculation and 'excessive' speculation is how speculators behave. Whenever their behaviour is driven by financial market strategies, rather than food market fundamentals, 'excessive' speculation can occur.<sup>198</sup> Speculation in the food markets is considered one of the key influencing factors to the inflation of food prices.<sup>199</sup>

Next to the research by Rabobank, other research also demonstrates that investors were drawn to the future commodities market at the onset of the current food crisis. It was unravelled that financial speculators' participation<sup>200</sup> in the milling wheat market

of Paris, the European benchmark, increased from 23 per cent (May 2018), to 72 per cent (April 2022). One specific category of financial speculators, investment companies, increased their presence on the buy-side of the wheat futures market from 4 per cent in 2018 to 25 per cent in April 2022.<sup>201</sup>

Information is important. Roman Herre, from the Heinrich Böll Stiftung, stated that: "the ABCD group is well informed about harvest levels, prices, currency fluctuations, weather data, and political developments in all parts of the world. Every day, data gathered from growing areas is analysed by financial experts." The data give agricultural commodity traders a big advantage over other parties in the food supply chain. This privileged position with regard to data and actual production is especially advantageous when the agricultural commodity market is volatile and troubled. In times of price spikes and volatility, it is important to have insights into the future supply of relevant agricultural commodities. Agricultural commodity traders can use this information to trade their products, and perhaps their derivatives contracts, at the right time and place.

UNCTAD concluded, in a recent report, that the agricultural commodity traders derive most of their profits from financial activities. They furthermore noted that "corporate profits from financial operations appear to be strongly linked to periods of excessive speculation in commodities markets and to the growth of shadow banking – an unregulated financial sector that operates outside traditional banking institutions." This was also the conclusion of a recent report by Sophie van Huellen and Tomaso Ferrando. 204

#### **Future Markets**

An important aspect of agricultural commodity trading is the price setting in agricultural commodity futures markets. These derivatives markets, where futures contracts are traded, have traditionally been used by large-scale producers and buyers of agricultural products to reduce price risk exposure ("hedging"). The commodity futures markets, for example, can assure farmers of a fixed price for their products to be delivered at a certain time, limiting their exposure to food price swings. At the same time, the buyer is assured of a certain price at a certain delivery time. The commodity futures markets are, furthermore, important for commodity traders to establish benchmarks for present-day prices.<sup>205</sup>

The difference that is created between the actual (future) price of the agricultural commodity, and the value of the contract makes it interesting for speculators to become involved. This buying and selling of futures contracts to make a profit, generally from price changes, rather than reduce price risks related to the physical exchange of the commodity, can be referred to as 'speculation'. To some extent, speculation can positively contribute to the smooth trading in agricultural commodities on futures/derivatives markets. The non-commercials (traders that are not linked with a specific commodity and have no interaction with the physical commodity), and their speculative behaviour, bear part of the risk and add liquidity to the market, since there is not always a direct match between a selling producer and a buying processor. As in any market in which there is more buying of futures contracts than selling, prices tend to go up.<sup>206</sup>

#### 4) Vertical integration

The ABCCDs dominate large parts of the value chain, from supplying farmers with loans, seeds, fertilizers and pesticides to storing, processing (crushing) and transporting food commodities. They are active in the up-, mid- and downstream activities with regard to the main commodities. This vertical integration gives the agricultural commodity traders a strong advantage with regard to access to important market data, and expands their influence in, and control of, the production stage all the way to processing.

The reality of vertically integrated trading houses is a trend confirmed by the sector itself. According to Sucafina, a Swiss-based coffee trader: "If we were content to stay at this size and we weren't vertically integrated, we would eventually get acquired by someone. (...) The trade house of the future will be more vertically integrated, and a big part of that's going to have to come from the farming side."<sup>208</sup>

The strong vertical integration of the agricultural commodity traders and their knowledge with regard to markets helps them to reinforce their business operations. For example in Brazil, sugarcane production is characterized by an increasingly consolidated and vertically integrated supply chain, controlled by a small number of traders, with closely interlocked markets for sugar and ethanol.<sup>209</sup>

Sugar prices are highly volatile and have interconnected impacts on the production ratio of both products, known as the sugar mix. When demand for ethanol is high, more sugarcane is directed towards ethanol production, causing a sugar shortage on the world market and hence increasing sugar prices.<sup>210</sup> Most sugarcane mills' can simultaneously produce sugar and ethanol, allowing mills flexibility on the capacity dedicated to sugar or ethanol depending on the market conditions.<sup>211</sup>

Vertically integrated sugar traders, such as Bunge, Cargill and COFCO, that own assets ranging from farms to mills, to transport terminals, can rapidly adjust production of ethanol versus sugar, and (through a tight networks of sellers, traders and buyers) dominate the process of determining spot prices and hedging on futures markets to set favourable prices for the crop in the future.<sup>212</sup> For this to work in an high-speed flow of information, sugar traders operate in increasingly integrated and concentrated chains with tight networks, pushing enormous volumes against small margins.

#### **CHAPTER 3**

## Conclusion

Profits of the five largest, globally operating, agricultural commodities traders spiked to extreme heights in the period during and after the recent food crisis. Following the years 2021 and 2022, ADM, Bunge, Cargill, COFCO and Louis Dreyfuss Company reported historic net profits and exceeded previously recorded net profits by two or three times, when compared to the 2016–2020 period.

Concurrently, more and more people are suffering from hunger. Rising food prices and shortages in food supply have brought many people on the brink of life. It is key to get a good understanding of the factors that contributed to the current or ongoing global food crisis. This global food crisis can be explained by many factors: a growth in conflicts in the world, failing crops due to climate change, soaring fertilizer prices, the disruption of the global food chain, food price shocks, and the reaction of the players on the derivatives markets where prices are being set.<sup>213</sup>

In this research, we have analysed the underlying structures that explain how the five largest food companies profit from the current food crisis, and we identify four key reasons why these Big Five are in a position to profit from food crises.

#### Oligopoly

The agricultural commodity traders have a strong and powerful market position. The ABCCDs control between 70 and 90 per cent of the global trade in commercial grains.<sup>214</sup> Furthermore, they exert a high level of control on the main export markets of key agricultural commodities such as soy and corn (for example in Brazil, the United States and Argentina).<sup>215</sup> Their dominance over the food market is also exerted through their monopoly on information. They hold complete or almost complete information and are not obliged to share this knowledge with consumers, other companies or governments.

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Another factor contributing to the oligopolistic position, is the process of market consolidation. There have been many mergers and acquisitions over the past decades. <sup>216</sup> This process has further fortified the position of the ABCCDs.

Overall, competition regulators have not prevented the creation of an oligopoly. At the time of writing of this report, another merger is taking place, between Bunge and Glencore-backed Viterra. The merger, creating a company worth more than US\$30 billion, will be the largest grain trading merger in over a decade. This is yet another example of the increased concentration of market power in the global agricultural commodity trading sector.<sup>217</sup>

The fact that three of the Big Five agricultural commodity traders are not publicly traded adds to the veil of mystery that surrounds these companies. For example, information with regard to the quantity of commodities in stock, the profit margins, and total net profits is not or only partially shared by the non-listed companies. Furthermore, agricultural commodity traders are non-transparent with regard to the amount of hedging and non-hedging derivatives contracts they are trading. Furthermore, agricultural commodity traders are not transparent with regard to the amount of hedging and non-hedging derivatives contracts they are trading.

#### 2) Interconnectedness and cooperation

Agricultural commodity traders do not only act as competitors. In many occasions, and at different levels, the companies engage and cooperate. There are various joint ventures between the majority of the agricultural commodity traders. There is, furthermore, collaboration in specific areas. For example, all ABCCDs currently cooperate through "Covantis", a digital platform where the companies exchange information about logistics and global trade operations in general. Another example is their cooperation in Brazil, where they are currently working together to create a 1000-kilometer railway to transport agricultural commodities such as grains.

Market power is closely tied to price-setting power in contexts where markets are highly concentrated<sup>218</sup>, and the noted interconnectedness can result in price setting, anti-competitive behaviour and cartel formation. Most ABCCDs have, over the past years, been accused and found guilty of anti-competitive behaviour.

Taking the market power and dominance of the ABCCD companies in consideration, in connection with their mixed role of competitors and partners, the potential for collaboration to create circumstances for extraordinary profits is not to be underestimated. Informal cartel-like behaviour can happen when one company increases the price and the other few competitors follow the price rise rather than competing with lower prices.<sup>219</sup>

#### 3) Influencing food availability

The size of the ABCCD companies is such that they are able to influence the global supply of food commodities. One way is through their storage capacity. As mentioned before, each agricultural commodity trader owns warehouse facilities to store food. To illustrate, the combined storage capacity of three agricultural commodity traders (ADM, Bunge and COFCO), as depicted in figure 6, is larger than the annual wheat consumption of the United States, the United Kingdom and Turkey combined. We have shown that there are strong reasons to believe that the traders did increase the volume of agricultural commodities in storage during the recent food crisis. However, due to insufficient transparency, no information is available with regard to actual volume of food in storage.

Another aspect that hugely impacts food prices, is speculation. Derivatives markets are key in establishing actual food prices and to hedge prices in the future against unexpected price changes for producers and processors. While a limited number of financial players support the functioning of the derivatives markets, excessive financial speculation, however, may occur when too many actors aim to financially exploit extraordinary circumstances (such as draught, conflict or climate change). This may create price hikes and instable and volatile markets and hence food prices.<sup>221</sup>

#### 4) Vertical integration

The fourth reason why the ABCCD are in a position to profit from food crises is related to their dominance over large parts of the value chain. Their value chain ranges from supplying farmers with loans, seeds, fertilizers and pesticides, to storing, processing (crushing) and transporting food commodities. Due to the involvement of the companies at various stages of the production process ("from farm to fork"), companies have unique access to valuable market data. This information puts the agricultural commodity traders at a huge advantage and can be used to influence, and control, the production stage all the way to processing. Vertical integration, furthermore, provides the traders with the possibility to allocate their product to the most (financially) beneficial output.

#### **CHAPTER 4**

## Recommendations

#### Recommendations on curbing monopoly power

There is an ongoing trend of market concentration in relation to agricultural commodity traders. The five largest traders (ADM, Bunge, Cargill, COFCO and LDC) already have monopolistic positions with regard to specific markets and specific commodities, both at a national, regional and global level. Recently, Bunge merged with another large agricultural commodity trader (Viterra), further strengthening its already powerful position. This trend of increasing concentration in commodity markets has been flagged by governmental bodies of many countries, but few have been able to successfully obstruct further consolidation.

The European Commission should investigate the various markets in which the ABCCD companies are active in the European Union, from physical markets to derivatives markets, including horizontal and vertical integration as well as the joint ventures and other cooperation agreements. The investigation should examine the negative impacts of concentration not only on consumers but also on small and medium-sized suppliers who are dependent on monopolists.

At the same time, the European Commission should raise the problematic concentration and anti-competitive behaviour of the agribusiness sector at the International Competition Network<sup>222</sup> and work in cooperation with authorities of the United States and other countries with which they have cooperation agreements and ongoing dialogues. Competition authorities must coordinate to break-up the ABCCD's monopoly power across the globe.

Governments should implement a windfall profit tax in relation to large agricultural commodity traders. The EU should combine this with the creation and implementation of price gouging laws that would limit excessive price increases in times of crisis. It is a troubling reality that rising food prices have driven people to hunger, while it resulted in record profits for the companies that trade these goods. The revenue resulting from this tax could then be used to fund measures to alleviate the pressure from higher food prices. The design of the windfall profit tax is further explained in the box below.

#### Recommendations on improving transparency

It is not only governments that hold large food reserves, also agricultural commodity trading companies (such as the ABCCDs) hold large food reserves. IPES-Food has reported that the reserves of these companies are likely to be sizable. IPES-Food further noted that: "with commodity speculation mounting (commodity traders – ED.), they have a clear incentive to hold stocks back until prices are perceived to have peaked".<sup>223</sup> The findings of this report underpin this expectation.

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Governments should enact legislation in order to force these companies to publish day to day information on the type and amount of food they hold in their reserves. Furthermore, a detailed dataset should be built, through data provided by the customs declarations, on specific information (inter alia on import price value, volume/weight of commodity, source/destination country) and connected to the international movement of commodities.<sup>224</sup>

Furthermore, national statistical offices, in collaboration with international partners and initiatives such as the Agricultural Market Information System of the G20, should continue efforts to measure the size of reserves to help design more effective policies and strengthen global food security.<sup>225</sup>

In addition, there should be more supervision by specific agricultural authorities of the physical agricultural markets and trade, to avoid undue stockholdings ('hoarding'). There should be more coordination between these agricultural supervisors and the supervisors of the derivatives markets to detect combined strategies of physical hoarding and financial speculation by the food traders.

#### Recommendations on curbing speculation

Agricultural commodity prices have increased substantially, especially after the Russian invasion of Ukraine. However, profits of the large agricultural commodity traders have increased much steeper than the increase in agricultural commodity prices. According to UNCTAD, one of the key explanations for this disparity is the financialisation of commodity trading. UNCTAD highlights that: "the bulk of financialized trades in commodities and food take place over the counter (OTC), or in the shadow banking system". They conclude that: "These two dimensions of opacity – industrial and corporate complexity of commodity traders, as well as their historical reliance on unregulated financial platforms – raise serious political economy and regulatory issues". 227

Many academics, experts and international organisations have argued that excessive speculation is contributing to the rising food prices. The increased presence of large financial actors (hedge funds, soveraign wealth funds, investment banks and pension funds) plays a crucial role in the recent food price rises, and made agricultural trading markets more volatile.<sup>228</sup>

Therefore, agricultural commodity traders should not only be treated as commercial traders but also as financial institutions. As stated by UNCTAD: "At its core, the problem of regulatory gaps centres on the dichotomy between the regulatory treatment of commodity traders as manufacturing corporations on the one hand, and their increasingly more profitable (yet unregulated) activities in financial markets, on the other." A change in the manner agricultural commodity traders are perceived is detrimental to any governmental reform of the regulatory oversight.

#### Windfall profit tax

Many countries have recently implemented a windfall tax for oil companies. The windfall tax is justified by these countries (as well as by the IMF) as these companies faced unexpectedly high profits during the recent energy crisis.

The rise of fossil fuel prices not only led to high profits for many energy companies but also increased pressure on households and businesses. This is used by policy makers as legitimization for the implementation of a windfall tax.

The revenue resulting from this tax could then be used to fund fiscal measures to alleviate the associated pressure from higher fuel prices. A similar pattern is observed in connection with the agricultural commodity traders. Similar with fossil fuel prices, agricultural commodity prices increased steeply following the Russian invasion in Ukraine, leading to unprecedented high profits for agricultural commodity traders. It did, however, also lead to a steep increase in food prices and put pressure on the purchasing power of consumers, especially for people already living in precarious conditions in the Global South.

In a 2022 publication, Gabriel Zucman, together with colleagues from the EU Tax Observatory, presented a specific design for a windfall profit tax. We will use the design of this windfall profit tax to calculate how much revenue such a windfall profit tax would yield, when applied to the ABCCDs. Zucman proposes a design based on the increase in market capitalization of companies (with a more regional focus) as well as a global windfall profit tax, focusing on companies' global net profits.<sup>230</sup> This windfall profit tax, which is similar in design to the European Commission proposal, considers windfall profit tax as any net profits 20 per cent above the average net profits in the past four years. Using a tax rate of 33 per cent, we calculated the total amount of taxes that this windfall tax would yield in the table below.

(in million US\$)	ADM	Bunge	Cargill	COFCO	LDC
Average net profit 2017-2020	1,549	77	2,897	2,151	316
20% above average	1,859	92	3,476	2,581	379
2021 net profit	2,731	2,167	4,920	3,600	697
Windfall profit 2021	872	2,075	1,444	1,019	318
(in million US\$)	ADM	Bunge	Cargill	COFCO	LDC
(in million US\$)  Average net profit 2018-2021	<b>ADM</b> 1,926	Bunge 567	Cargill 3,417	<b>COFCO</b> 2,614	LDC 411
Average net profit			•		
Average net profit 2018-2021	1,926	567	3,417	2,614	411

As observed above (and also mentioned earlier) each individual agricultural commodity trader experienced extremely high net profits for the years 2021 and 2022. This led, for these five traders, to windfall profits of US\$ 5,729 million for 2021 and US\$ 6,402 million for 2022. Following a hypothetical tax rate of 33 per cent, this would lead to extra global tax revenues of US\$ 1,890 million (2021) and US\$ 2,113 million (2022).

The research above has outlined the way in which agricultural commodity traders have been profiting from the recent food crisis. While the strong increase in food prices has boosted the profits of the agricultural commodity traders, it has pushed millions of people into poverty. Based on the most recent figures (from ADM, Bunge and Cargill) 2023 profits will be in line with the exceptional years of 2021 and 2022, meaning that the traders are still making excessive profits. Many policymakers, both intergovernmental and governmental, have criticized the position of the agricultural commodity traders and take the position that: 'food is a fundamental human right'.231 The effect of high food prices is especially felt by poor people, because they spend a larger percentage of their income on food. The poorest households of the world, mainly located in the Global South, spent more than 50 per cent of their income on food.<sup>232</sup> Following the research, several recommendations are key to deter the powerful position of the largest agricultural commodity traders and curb the swings in international food prices.

#### **ANNEX**

# Company profiles of the ABCCDs

In the following section, we will present an in-depth profile of the business of the five agricultural commodity traders.

#### **Archer Daniel Midlands (ADM)**

Archer Daniel Midlands is one of the largest agricultural commodity traders world-wide. Its headquarters are based in Illinois, the United States. The origins of the ADM company can be traced back to 1902 when George A. Archer and John W. Daniels started a linseed crushing business in Minneapolis, United States. The company was registered as 'Archer-Daniels Linseed Company'. In 1923 the company acquired the Midland Linseed Products Company and the current name was established: the Archer-Daniels-Midland Company. 234

The company rapidly developed and was already listed on the New York Stock Exchange in 1924.<sup>235</sup> By the early 1950s, it was the largest soybean processor in the US.<sup>236</sup> During the second half of the 20th century, the company managed to increase its soybean processing capacity, grew its corn division and diversified its business by investing in cacao.<sup>237</sup> ADM also entered the US ethanol production and accounted, by the mid-1990s, for 90 per cent of the US corn-made ethanol production.<sup>238</sup>

However, the last decade of the 20th century marked difficult times for ADM, as the company was investigated for a price-fixing conspiracy, together with four companies from Japan and South Korea. It ultimately pled guilty, settled federal charges for US\$ 100 million and paid US\$ 400 million to plaintiffs and customers. The court cases connected to the price-fixing scandal took a total of nine years (from 1995 until 2004).<sup>239</sup>

The company went through spectacular growth in the early 2000s, when its annual revenue<sup>240</sup> went from around US\$ 18.6 billion (2000), US\$ 30.7 billion (2003), US\$ 69.8 billion (2008) to US\$ 89.6 billion (2013). The revenues declined in the years thereafter only to rise again to its 2013 level around 2021. The US\$ 100 billion revenue threshold was passed in 2022 with a record turnover of US\$ 101.6 billion.<sup>241</sup> Profitability has been relatively stable throughout the years 2005–2020, varying between US\$ 1 billion and

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US\$ 2.2 billion (with only one outlier in 2012, when net profits were only US\$ 674 million). Net profits during the period of 2005–2020 averaged US\$ 1.6 billion. The net profits increased to historic heights in 2021 (to US\$ 2.7 billion), and reached a new record in 2022 (close to US\$ 4.4 billion). The profitability of ADM also comes to the forefront with regard to payments to its shareholders. ADM spent, in 2022, a total of US\$ 2.3 billion in dividend payments and share repurchases. This has made 2022 its 50th consecutive year of dividend increase. 2022 Executive compensation to ADM's CEO Juan Luciano was close to US\$ 25 million. 244

#### **ADM - Revenue & Profit**

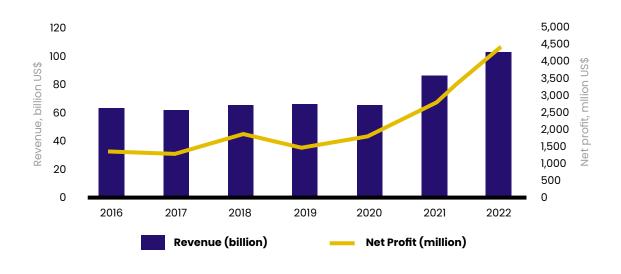


Figure 9.245

ADM defines itself as a "nutrition" company, with soybean and corn being its most important commodities.<sup>246</sup> ADM is the self-proclaimed largest corn processor and most diversified oilseed business worldwide.<sup>247</sup> Next to trading, it is active in crushing oilseeds and the transportation of agricultural commodities. It divides its business operations into three segments: (1) AG Services and Oilseeds, (2) Carbohydrate Solutions and (3) Nutrition.<sup>248</sup>

AG Services and Oilseeds<sup>249</sup> is by far the largest segment, as it accounted (in 2021) for about 79 per cent of ADM's total revenues, followed by Carbohydrate Solutions (13 per cent)<sup>250</sup> and Nutrition<sup>251</sup> (8 per cent).<sup>252</sup> The "AG services and Oilseeds" segment includes, next to the trading and transportation of food commodities, the activity of crushing oilseeds (mainly soybeans, but also cottonseed, sunflower seed, canola seed, rapeseed and flaxseed) into vegetable oils and protein meals. The various oil products are sold as ingredients for the production of food, energy and for industrial uses.<sup>253</sup>

With regard to the origins of the commodities (from the AG Services and Oilseeds segment) handled by ADM, close to 50 per cent comes from North America with just

over a quarter originating from South America. Less than 20 per cent originates from Europe, the Middle East, Africa and India.<sup>254</sup> The facilities, owned by ADM, are also predominantly located in North America. About 71 per cent<sup>255</sup> of all the facilities owned by ADM, and related to the processing of agricultural products, are located in North America, followed by Europe (18 per cent), South America (10 per cent) and Asia (1 per cent).<sup>256</sup>

Next to processing facilities, ADM also has the ability to store its food staples in the so-called procurement facilities. The total storage capacity owned by ADM is about 18 million metric tons. Together with the leased storage facilities, ADM is capable of storing close to 21 million metric tons of food staples (similar to Turkey's annual consumption of wheat). <sup>257</sup> As with the processing facilities, ADM's own storage capacity, in terms of metric tons, is predominantly located in North America (79 per cent) followed by South America (13 per cent) and Europe (8 per cent). ADM does not own any storage facilities in Asia. <sup>258</sup>

The most important agricultural commodities for ADM are soybeans, corn and soybean meal as they respectively accounted for 18 per cent, 14 per cent and 12 per cent of total revenues in 2021.<sup>259</sup> ADM processed (2021) around 35 million metric tons of oilseeds and around 19 million metric tons of corn.<sup>260</sup> Wheat is another important commodity, as ADM processes around 30.000 metric tons of wheat each day.<sup>261</sup>

An important aspect of the ADM business is the production of biofuels, such as bio-ethanol and biodiesel. The group has production plants in Germany, Brazil, India, Indonesia and the United States, with a global capacity of 1.700 million litre per year. This makes ADM one of the larger biofuel producers in both Germany and the United States. ADM also dominates the US biodiesel imports. During the month January 2023, nearly two-thirds of all US biodiesel imports were controlled by ADM. In 2021 six companies filed a lawsuit against ADM claiming that between 2017 and 2019 ADM had a monopoly over the Argo terminal ethanol market (70 per cent control rate), selling 90 per cent of the ethanol.

As discussed, ADM owns both factories that process agricultural commodities (such as crushing facilities) and store agricultural commodities (procurement facilities). ADM furthermore owns infrastructural assets that are part of its transportation division. The company owns<sup>265</sup> 11,300 railcars, 1,300 trailers, 1,800 river barges, 310 trucks, 120 boats and 3 oceangoing vessels.<sup>266</sup>

ADM has multiple partnerships, both in the United States and globally. An interesting partnership is, for example, the joint venture SoyVen, which it owns together with Cargill (both hold a 50 per cent interest). The main purpose of the joint venture (established in 2018) is to serve the Egyptian market with soybean meal and oil products. The joint venture is registered in Switzerland.<sup>267</sup> Another interesting partnership is the one with Wilmar: Olenex (Wilmar has a 62.5 per cent stake, ADM a 37.5 per cent stake). This joint venture was founded in 2012 and became a full-function joint venture in 2016.<sup>268</sup> Its main purpose is to manufacture and sell edible oils and fats, on a global scale.<sup>269</sup> The joint venture is specialized in processing edible oils and fats (such

as palm oil).<sup>270</sup> The joint venture markets refined oils and fats from its plants in the Czech Republic, Germany, the Netherlands, Poland, and the U.K.<sup>271</sup> The joint venture is managed from Rolle, Switzerland.<sup>272</sup> ADM also holds an important stake in the Wilmar company, they own about 22 per cent of the Wilmar shares.<sup>273</sup>

ADM has a total number of employees of about 42,000. Nearly 50 per cent of these employees are based in North America, followed by EMEA (around 25 per cent), South America (19 per cent), Asia Pacific (6 per cent) and Central America/Caribbean (1 per cent).<sup>274</sup>

#### **Bunge**

Bunge is an American company headquartered in St. Louis, Missouri, and incorporated in Bermuda since 1990.<sup>275</sup> The company was founded in 1818 by Johann Peter Gottlieb Bunge in Amsterdam, the Netherlands.<sup>276</sup> In the beginning of the 20<sup>th</sup> century, the company relocated to São Paulo, due to its large-scale activities in South America.<sup>277</sup> After almost 200 years of being a family-owned company, Bunge became publicly listed on the New York Stock Exchange in 2001 as Bunge Limited, and moved its head-quarters to New York.<sup>278</sup> In the first two decades of 2000, Bunge intensified its investments in edible oils, expanded its business in sugarcane (especially in Brazil), and set foot into the biofuel business. In December 2022 the Board of Directors unanimously approved the change of place of incorporation to Switzerland.<sup>279</sup>

Bunge has a strong position in oilseed processing and plant-based oils and fats.<sup>280</sup> The company is strategically focusing on agribusiness and food since 1996, following a decision to divest from unrelated business lines,<sup>281</sup> such as its paint company.<sup>282</sup> Bunge's core segments are agribusiness, refined and specialty oils and milling. The agribusiness segments' key products include soybeans, soy oil, soy meal, corn, and wheat.<sup>283</sup> In 2021, the agribusiness segment accounted for 73.7 per cent of the total net sales.<sup>284</sup> Refined and specialty oil products accounted for 22.5 per cent of the net sales, followed by wheat milling products (2.2 per cent) and corn milling products (1 per cent).

For 2021, the majority of the net sales to external customers are located in Europe (37.6 per cent), followed by the United States (24.8 per cent), Asia-Pacific (20.9 per cent), Brazil (7.6 per cent), Argentina (4.5 per cent), Canada (3.1 per cent) and the rest of the World (1.5 per cent). The commodities of its agribusiness segment mainly originate from Argentina, Australia, Brazil, Canada, the European Union, Russia, Ukraine, and the United States.<sup>285</sup>

Currently operating in more than 40 countries, Bunge has over 300 facilities (such as grain elevators, port terminals, oilseed processing plants and oil refineries). Bunge stores its commodities in 115 facilities across the globe, with a storage capacity of 14 million metric tons. The company owns a total of 52 oilseed processing plants globally, more than 80 grain elevators globally, and 3 fertilizer processing and blending plants located in Argentina. But a fertilizer processing and blending plants located in Argentina.

The refined and specialty oils segment has an aggregate storage capacity of 0.8 million metric tons;<sup>289</sup> it counts 69 refining and packaging facilities in the world and 5 distribution centres in Brazil.<sup>290</sup> Bunge's milling business can count on 23 facilities and 9 storage facilities, which account for an aggregate storage capacity of 1.3 million metric tons.<sup>291</sup> Furthermore, Bunge has 28 port facilities, namely 11 in Latin America (Argentina, Brazil and Paraguay), 2 in North America (the United States), 2 in Europe (Poland and Ukraine), 1 in Southeast Asia (Vietnam) and 1 in Australia.<sup>292</sup>

In the 2021 annual report, Bunge claims to have more than 22,000 employees, distributed across four main geographical regions.<sup>293</sup> Specifically, the employees are predominantly located in South America (8,539). Europe, the Middle East, and Africa (EMEA) account for 6,578 employees; the North American employees' headcount is 4,528 employees, and Asia hosts 3,061 employees.<sup>294</sup>

Looking at the period between 2007 and 2022,<sup>295</sup> Bunge had a peak in revenue in 2008 (US\$ 52,574 million) which corresponded with an increase in net profits (US\$ 1,598 million). In 2010, Bunge had a record in net profits of US\$ 2,350 million. During the same year, Bunge had a pre-tax gain of US\$ 2,440 million from the sale of the Brazilian fertilizer actions.<sup>296</sup> The revenue increased between the 2010–2012 period, with a record of US\$ 61,347 million in 2012, to then decline in the subsequent years until 2015.

Since 2015 Bunge's revenues were stable until 2020 when revenues started to rapidly increase, reaching a record-high of US\$ 67,232 million in 2022. The profits remained stable in the period between 2010 and 2018 and recovered in 2020 from a substantial loss in 2019, owing to major accounting charges.<sup>297</sup> Bunge kept an increasing trend through 2021 and 2022 as these net profits account for the highest net profits in its history.<sup>298</sup>

#### **Bunge - Revenue & Profits**

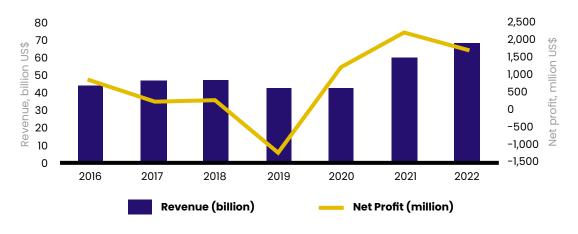


Figure 10.<sup>299</sup>

#### Cargill

Cargill is the largest agricultural commodity trader worldwide.<sup>300</sup> It is privately owned and currently the largest (based on revenue) privately owned company in the United States.<sup>301</sup> The company is responsible for 25 per cent of the US grain exports, and, on any given day, can handle up to 20 per cent of the world's food supply. Its 2022<sup>302</sup> revenue was around US\$ 165 billion.<sup>303</sup> It employs about 155,000 people worldwide.<sup>304</sup> Its headquarters are based in the state of Minnesota, in the United States.<sup>305</sup>

The agricultural commodity trader started its activities in 1865 when William Wallace Cargill became the owner of a grain flat house in Conover, Iowa (the United States). Until the 1920s, the company remained relatively small, with only 200 employees and all of its activities within the borders of the United States. Due to marriage, the MacMillan family became intertwined with the Cargill family and eventually, during the late 1910s, took control of the company. Cargill's descendants nowadays only own about 10 per cent of the company.<sup>306</sup> The company's main focus was on grain storage facilities.

Its current name, Cargill Incorporated, was established in 1930 at the time the company began expanding its business with offices in Canada, the Netherlands and Argentina. The company quickly grew in the decade before and during the second world war and gradually expanded its business globally after the second world war, with important business divisions in Europe and Asia.<sup>307</sup> Its exports to Russia steeply increased during the two decades after the second world war.<sup>308</sup> The annual earnings made by the company surpassed the US\$ 1 billion threshold for the first time in 2003 and the quarterly results passed US\$ 1 billion for the first time in 2008.<sup>309</sup> The fiscal years 2021, 2022 and 2023 have also shown an enormous increase in revenues and profits for Cargill.

While the average revenue for the years 2016–2020 was US\$ 112 billion, it increased to US\$ 135 billion (2021) and US\$ 165 billion (2022).<sup>310</sup> Net profits also increased, from a 2016–2020 average of US\$ 2.78 billion to a historically high US\$ 4.90 billion (2021) and US\$ 6.68 billion (2022).<sup>311</sup> As a rule of thumb, Cargill reinvests about 80 per cent of its earnings in the business. This provides Cargill with the ability to expand rapidly, for example, only in 2022 it had more than US\$ 5 billion to reinvest as it sees fit.<sup>312</sup> Its most important business segments are animal nutrition (livestock feed) and protein (meat business). They have contributed up to 40 per cent of total earnings before interest, taxes, depreciation and amortization (EBITDA) in the fiscal year 2021 and the contribution even rose to 50 per cent for the fiscal year 2022.<sup>313</sup>

Of all the five agricultural commodity traders analysed in this report, Cargill is not only the largest but also one of the most diversified. Different from the other companies, Cargill is strongly horizontally integrated, having assets throughout the entire value chain. This means that Cargill, outside of processing and distribution, also owns farmland, such as palm oil plantations.<sup>314</sup> It is difficult, however, to paint a complete

picture of the business activities of Cargill. As a private-owned company, it is not obliged to publish detailed information. For example, it has published its quarterly results reports until 2019, but unilaterally decided to cease publishing them from 2020 onwards.<sup>315</sup> Its annual reports are not very detailed.

#### Cargill - Revenue & Profit

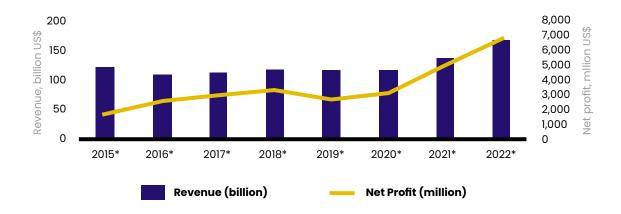


Figure 11.316

As the company is not publicly listed, it is entirely up to Cargill how to structure its annual report (and more importantly, what information to omit). Its 2022 annual report, for example, only contains 22 pages and does not report on (net) profits.<sup>317</sup> UNCTAD has also been very critical of the limited and subjective information shared by Cargill. They mentioned that "some firms, most notably Cargill Inc and Noble Group Limited, do not provide information at the standard required for our analysis. Groups like these provide some figures publicly on their website, but these represent unaudited and selectively presented information unsuited to our investigation".<sup>318</sup> There is some information available, through Cargill's ESG reporting<sup>319</sup> and secondary sources. This enabled the categorization of Cargill's activities according to its reported key business segments.<sup>320</sup>

Cargill's first business segment is 'food ingredients & bio-industrial'. Important agricultural commodities related to this segment are soy, cocoa and palm oil. This business segment employs about 24,000 employees.<sup>321</sup>.

The first commodity included in this business segment is soy. Cargill is a leading purchaser, processor and transporter of soybeans around the world.<sup>322</sup> An important continent for global soy production is South America. Cargill sources soybeans from Brazil, Argentina, Paraguay, Bolivia and Uruguay.<sup>323</sup> Cargill, together with Bunge,

<sup>\*</sup> The fiscal year begins June 1 and ends May 31

<sup>\*\*</sup> Profits for the fiscal year ending May 31 2023 have not been reported

dominates the Brazilian soy trade market.<sup>324</sup> Cargill also has a strong position in the global corn trade. It is, for example, the largest exporter of Brazilian corn (based on data from 2019).<sup>325</sup> The strong footprint of Cargill in South America is also apparent from its physical presence: it owns, throughout South America, about 145 country elevators, 13 processing plants and 14 ports.<sup>326</sup>

Cargill is the world's second-largest producer of cocoa and chocolate. The cocoa it processes and sourced from four countries: Ghana, Cameroon, Indonesia, and Brazil. It has a total of 31 processing plants worldwide related to cacao.<sup>327</sup>

Another important agricultural commodity is palm oil. Cargill is one of the largest palm oil traders worldwide and is responsible for a large share of palm oil imports in the United States.<sup>328</sup> Most of its palm oil is sourced in the world's leading palm oil-producing countries: Malaysia and Indonesia. Respectively 41 per cent and 29 per cent of all palm oil handled by Cargill are from these two countries. About 17 per cent of palm oil is derived from Latin America (Brazil, Colombia, Costa Rica, Guatemala, Honduras, Ecuador, Mexico, Nicaragua, Panama and Peru).<sup>329</sup> Cargill dominates the whole value chain of palm oil. As mentioned before, it owns 9 palm oil plantations (for example in Indonesia, where it owns 189 thousand hectares).<sup>330</sup> The company furthermore owns 12 kernel crushing plants and mills (mainly in Indonesia) and 18 refineries (both in South-East Asia, Europe, the United States, China, India, Brazil, Turkey and Russia).<sup>331</sup>

Cargill's second business segment is animal nutrition. Its most important business is to deliver animal nutrition to livestock and aquaculture farmers, feed manufacturers and distributors. The Animal Nutrition operations employ about 20,000 employees, divided over 280 locations and in 40 countries. It is stated by Cargill that it produces about 18 million metric tons of feed per year. Cargill is the third-largest commercial feed company worldwide. Animal and Nutrition is a very important contributor to Cargill's earnings and has, for some years, also been the largest contributor to its earnings. It is boasted by Cargill that the operations of the Animal Nutrition segment touch the plates of more than one billion people every day.

The third business segment within Cargill's business is 'Protein & Salt'. The main focus of this business segment is on harvesting, processing and producing beef, poultry, value-added meats and egg products, as well as salt. These activities take place in North- and Central America, China, Southeast Asia and the UK.<sup>337</sup> Most of Cargill's employees work in 'Protein & Salt', around 60,000.<sup>338</sup> Beef is a key element of Cargill's protein business, as it slaughters more than eight million cattle and produces nearly eight billion pounds of boxed beef and by-products each year. It furthermore operates 30 slaughterhouses throughout the United States and Canada.<sup>339</sup> Its largest slaughterhouses in the US and Canada process close to 5,000 head of cattle a day.<sup>340</sup> It is estimated that Cargill supplies about 22 per cent of the US domestic meat market.<sup>341</sup>

'Agricultural Supply Chain' is Cargill's fourth and most traditional business segment. The key focus of this business segment is trading grains and oilseeds, such as wheat, corn, barley and sorghum.<sup>342</sup> Cargill dominates various supply chains of the aforementioned agricultural commodities, both in and outside of the United States. Cargill, for example, controls about 25 per cent of the grains and soybeans produced by US farmers<sup>343</sup> and is Argentina's leading grain exporter.<sup>344</sup>

The last business segment is 'Metals and Shipping'. Its metals division (headquartered in Singapore) focuses on ferrous markets. In numbers, the Cargill metal division moves around 50 million tons of physical iron ore and 6 million tons of physical steel globally.<sup>345</sup> Next to metals, Cargill is also heavily involved in transportation, both over land and over water. Cargill has a fleet of about 570 ships, which annually move around 200 million tons of dry bulk commodities worldwide.<sup>346</sup>

Cargill has a strong presence in the US market. Based on sales and other revenues (2019), 34 per cent of its revenue is realized in North America, followed by Asia Pacific (29 per cent), the EMEA region (29 per cent) and Latin America (13 per cent).<sup>347</sup> This is slightly different for the geographical distribution of its employees. Following 2021 statistics, 35 per cent of its employees are based in Asia Pacific, followed by North America (30 per cent), Latin America (21 per cent) and the EMEA region (14 per cent).<sup>348</sup>

As mentioned before, Cargill is a privately-owned company. Its ownership has always been in the hands of two families (bound through marriage): the Cargill-MacMillan family. Reportedly, about 23 people from that family own 88 per cent of the company. This makes the family, according to Forbes, the 11th richest family in the world. The family has, outside royalty families, most billionaire family members worldwide (14 in total). 350

#### COFCO

COFCO (China National Cereals, Oils and Foodstuffs Company)<sup>351</sup> is a Chinese stateowned company, headquartered in Beijing.<sup>352</sup> Although the company claims to be the largest agribusiness (worldwide) by net asset value<sup>353</sup>, little is known with regard to this company. It reportedly (in)directly serves one-quarter of the world's dining tables.<sup>354</sup> As COFCO is state-owned, there are limited obligations with regard to publicly sharing information. COFCO, for example, does not regularly publish annual reports. It is therefore difficult to obtain detailed information.

COFCO group was established in 1949 and soon evolved to become China's largest food and agriculture company. During the first decades of its existence, the company focused on trade in grains and edible oils. Between 1952 and 1987 it was the sole agricultural products importer and exporter of China.<sup>355</sup> The company furthermore remained focused on China and had little business overseas.<sup>356</sup> The key change, in the international operations of COFCO, came in 2014 and 2015. The company publicly announced its aim to rival the "ABCD" quartet of agricultural companies and publicly stated that they wanted to become the "Second C" in the group.<sup>357</sup> To gain access to

the international agricultural market, COFCO bought large stakes in the Netherlands-based "Nidera" and the Hong Kong-based "Noble Group Ltd". These companies had worldwide assets in international production, domestic logistics and transportation processing centres and sales network. This gave COFCO a strong presence in key agricultural export countries (both in Latin America, the area around the Black Sea and Indonesia). Full ownership of Nidera and Noble Group was acquired in 2016.<sup>358</sup>

The expansion of COFCO, mainly through its international trading arm COFCO International, resulted in strong growth figures. While COFCO's revenue was close to US\$ 60 billion in 2015, it passed the US\$ 100 billion figure in 2021. Net profits grew even stronger during these years. While net profits were less than US\$ 1 billion in 2016, they more than tripled to 3.6 billion in 2021. Reportedly, more than half of the revenues are derived from its overseas business. Its total number of employees is about 150.000. The strong representation of the revenues are derived from its overseas business.

#### **COFCO - Revenue & Profits**

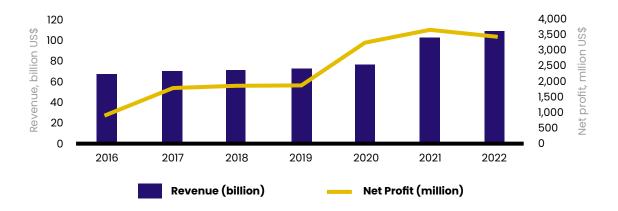


Figure 12.<sup>362</sup>

The main agricultural commodities COFCO focuses on are grain, soy, corn and sugar. However, the group does also trade in cotton, meat and dairy products. GOFCO is, like Cargill, both horizontally and vertically integrated and dominates whole value chains from farmer to consumer. With regard to its meat division, for example, it owns 90 pig farms, 3 slaughterhouses and 3 meat processing plants. Its meat is sold under COFCO's brands 'Maverick' and 'Joycome'. Around 50 per cent of COFCO's net profit is derived from the agricultural and food business. Fit does, however, also have important business operations in real estate and finance. COFCO's real estate division (named "Grandjoy") builds and operates both commercial and residential real estate throughout China. The food department of COFCO operates various brands, such as 'Fortune' (famous for its rice products), 'Xiangxue' (noodles, flour), 'Mengniu' (dairy products), 'Greatwall' (wine) and 'Jiugui' (liquor). Another major division is finance, operated by COFCO's investment platform 'COFCO Capital Holdings Co.'. This division invests in insurance, asset and wealth management, futures trading and even operates a supply chain-related banking division.

in China and is since 1979 responsible for Coca-Cola's activities in China. Through their joint venture, 'COFCO Coca-Cola Beverages Limited', COFCO manufactures, distributes, promotes and sells Coca-Cola products in China.<sup>369</sup>

COFCO dominates Chinese agricultural imports and exports. For example, 50 per cent of Chinese total sugar imports are accounted for by COFCO. COFCO furthermore is the leading meat and dairy product supplier in China's domestic market.<sup>370</sup> COFCO, although traditionally focused on China, has strongly evolved its international business over the past decades. Currently, its global annual trading volume is more than twice that of China's annual imports.<sup>371</sup> Its total annual turnover is close to 150 million tons, with a processing capacity of 90 million tons (two-thirds of that capacity is located in China). As with the other companies, COFCO holds key strategic assets in the international trade business. It has, for example, a global storage capacity of 31 million tons, an annual port transit capacity of 65 million and an annual processing capacity of 95 million tons.<sup>372</sup>

There is, as noted, little information available with regard to COFCO. For example, it is unknown where its 150,000 employees are based, where most of its sales are made, or where most of its agricultural commodities are grown. COFCO International, however, does provide more information. As this company makes up half of COFCO's annual revenues and as this company entails the global commodity trading arm of COFCO, we will shed light on this subsidiary.

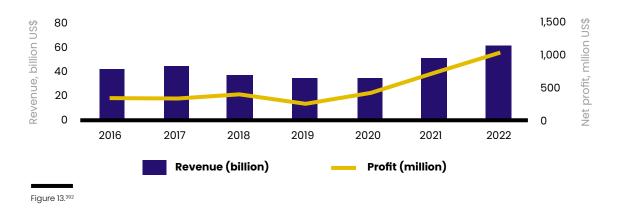
COFCO International was established in 2014 and moved its headquarters to Geneva (Switzerland) in 2018.<sup>373</sup> The company is majority owned by COFCO group (60 per cent stake), and its other five shareholders are Temasek, Standard Chartered Bank, China Investment Corporation, Hopu Investment Management, and the International Finance Corporation of the World Bank. The company has regularly hinted at becoming listed, which might have been demanded by the non-Chinese shareholders, but has not yet acted on this accordingly.<sup>374</sup> The main geographical focus of the company is South America (60 per cent of its investments are on this continent) with Brazil as the most important country.<sup>375</sup> Around 40 per cent of COFCO International's worldwide investments and two-thirds of its employees (of a total of 11,500) are based in Brazil.<sup>376</sup> Its warehouses are also predominantly located in South America (36), followed by EMEA (17), North America (3) and Asia-Pacific (1). The majority of the ports owned by COFCO are also located in Latin America (8 out of 15) as well as processing facilities (8 out of 11).377 COFCO International handles (based on 2022 figures) primarily in grains (72 million tons), oilseeds (38 million tons) and sugar (18.5 million tons).<sup>378</sup> The strong presence of COFCO in Latin America also comes to the forefront when compared with the other ABCD companies. COFCO is the second largest (after Cargill) grain trader in Argentina, according to the 2021 statistics.<sup>379</sup> COFCO has also obtained a strong position in the largest export country for soybeans, Brazil. Although export rankings (based on 2019 trade statistics) are led by Bunge and followed by Cargill and LDC, the fourth position has now been taken by COFCO.<sup>380</sup>

### **Louis Dreyfus Company**

Louis Dreyfus Company B.V. (LDC), headquartered in Rotterdam, the Netherlands, is one of the biggest agricultural commodity trading companies in the world, self-describing as a supply chain manager.<sup>381</sup> It is indirectly owned by Netherlands-based Louis Dreyfus Holding B.V. (55%) and by Abu Dhabi-based ADQ (45%).<sup>382</sup> LDC was founded in 1851 by Léopold Louis-Dreyfus in France, specializing in the wheat trade to Switzerland.<sup>383</sup> The history of the company in the nineteenth century is characterized by strong diversification. The company expanded its grain trading activities in Argentina, started in the sugar, citrus, oilseeds, and coffee industries in Brazil, started trading in energy products (oil and gas), and expanded into the electricity market (becoming one of the largest telecommunications companies in France in the early 2000s).<sup>384</sup> Louis Dreyfus Company employs a total of 17,667 people as of 2022 reporting.<sup>385</sup> Most employees are located in Latin America (65 per cent), followed by Asia (14 per cent), EMEA (13 per cent) and North America (8 per cent).<sup>386</sup> The company accounts for about 10 per cent of the world's trade in agricultural products.<sup>387</sup>

Analysing the 2016–2022 financial results of LDC (see Figure 14), shows that revenue decreased between 2018 and 2020 but grew rapidly from 2020 onwards.<sup>388</sup>
Concomitantly, in 2019 the net profits reached the lowest level in the period analysed after a slow growth trend, to then start to grow exponentially in the subsequent years to reach a peak in net profit in 2022.<sup>389</sup> The decrease in net profit for the financial year 2019 is, according to the company, partially attributed to lower soybean and soymeal average prices.<sup>390</sup> Allegedly, factors such as the swine fever in Africa, geopolitical instability, tensions in the US–China trade, and the oversupply of commodities have also impacted the company, together with the onset of the pandemic.<sup>391</sup>

#### **LDC - Revenue & Profit**



After divesting from its metals and fertilizer business in 2018,<sup>393</sup> its main segments are divided into two broad categories: value chain (carbon solutions, freight, grain and oilseeds, global markets, juice and food and feed solutions<sup>394</sup>) and merchandising (coffee, cotton, rice, and sugar) with an approximate volume of commodities sourced, processed and transported of 80 million tons annually.<sup>395</sup> Higher prices across all the

product lines of LDC's Merchandising Segment, together with higher prices in the grains and oilseeds product lines of its Value Chain Segment, accounted for a year-on-year net sales increase of 36 per cent in the Merchandising Sector, and 16 per cent in the Value Chain Segment (comparing 2022 with 2021 data).<sup>396</sup> Specific information about each revenue stream is not available, since LDC reports consolidates figures for the two broad segments.

LDC is active in more than 100 countries across six regions.<sup>397</sup> The annual report provides only visual aggregated information about the number of facilities by type, not specifying their respective storage capacity. Latin America accounts (in terms of asset value) for most of the storage and transport facilities (56 per cent), predominantly related to grains and oilseeds. This is followed by the EMEA region (16 per cent), South and South-East Asia (14 per cent), North Asia (8 per cent) and North America (6 per cent).<sup>398</sup>

The European roots of LDC are also noted in the geographical spread of their sales. 29 per cent of total sales are realized in the EMEA region, followed by South and South-East Asia (24 per cent), North Asia (22 per cent), North America (15 per cent) and Latin America (10 per cent).<sup>399</sup>

LDC is predominantly a family-owned business. Margarita Louis-Dreyfus, a Russian billionaire, increased her ownership of LDC from 80 per cent to 96.2 per cent, after buying other family members' stake in the company for US\$ 825 million in 2018. In 2020 she decided to sell 45 per cent to ADQ, a state-owned holding company in Abu Dhabi.

# **Endnotes**

- "Why do more than 800 million people live in hunger?", Al Jazeera, May 28, 2023, https://www.aljazeera.com/ news/2023/5/28/why-is-global-hunger-on-the-rise-2.
- Global Network Against Food Crises and Food Security Information Network, rep., World Food Programme, May 4, 2022, 6, https://www.wfp.org/publications/global-report-food-crises-2022.
- 3. Ibid., 5 & 29.
- "ADM Announces 8% Dividend Increase in Wake of Outstanding 2021 Results, Favorable 2022 Outlook," ADM, January 25, 2022, https://investors.adm.com/news/news-details/2022/ADM-Announces-8-Dividend-Increase-in-Wake-of-Outstanding-2021-Results-Favorable-2022-Outlook/default.aspx; "Bunge Reports Fourth Quarter and Full-Year 2021 Results," Bunge, September 2, 2022, https://investors.bunge.com/investors/news-andevents/press-releases/year/2022/02-09-2022; Rupert Neate, "Soaring food prices push more Cargill family members on to world's richest 500 list," The Guardian, April 17, 2022, https:// www.theguardian.com/news/2022/apr/17/soaring-food-prices-push-more-cargill-family-members-on-to-worldrichest-500-list.; COFCO International (@COFCOINTL). 2022. "#COFCO Corporation, our majority shareholder, announced record performance for 2021. Operating income exceeded USD 103.8 billion, up from USD 83 billion in 2020. Total profits exceeded USD 3.6 billion, up USD 377 million compared to 2020." Twitter, January 17, 2022, 10:04 a.m. https://twitter.com/ COFCOINTL/status/1483017357454983169?ref src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E14830173574 54983169%7Ctwgr%5Ef3d66345963b79db2a04d40861cdaf-1815d45641%7Ctwcon%5Es1\_c10&ref\_url=https%3A%2F%2Fpublish.twitter.com%2F%3Fquery%3Dhttps3A2F2Ftwitter.com2F-COFCOINTL2Fstatus2F1483017357454983169widget%3DTweet.; "Louis Dreyfus Company Reports Strong 2021 Financial Results," Louis Dreyfus Company, March 22, 2022, https://www.ldc.com/ press-releases/louis-dreyfus-company-reports-strong-2021-financial-results/.
- 5. See analysis chapter 2.
- 6. For Bunge the first nine months of 2023 net profits were slightly above the historically high 2021/2022 net profits. "Bunge Reports Third Quarter 2023 Results", Bunge, May 29, 2023, https://investors.bunge.com/financial-information/quarterly-results/2023. For ADM the first nine months of 2023 net profits were slightly below the historically high 2021/2022 net profits.
  - ADM Reports Third Quarter Earnings per Share of \$1.52, \$1.63 on an Adjusted Basis", ADM, October 24, 2023, https://investors.adm.com/news/news-details/2023/ADM-Reports-Third-Quarter-Earnings-per-Share-of-1.52-1.63-on-an-Adjusted-Basis/default.
- "Global impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation", UN Global Crisis Response Group on Food, Energy and Finance, June 8, 2022, https://unctad.org/system/files/official-document/un-gcrgukraine-brief-no-2\_en.pdf, 10 & 12.
- Fiona Harvey, "Record profits for grain firms amid food crisis prompt calls for windfall tax," The Guardian, August 23, 2022, https://www.theguardian.com/environment/2022/aug/23/record-profits-grain-firms-food-crisis-calls-windfall-tax.
- Thomson Reuters Eikon, [ADM Financial summary Revenue from Business Activities – Total], Data set, 2022, https://eikon. thomsonreuters.com/index.html.
- Thomson Reuters Eikon, [BUNGE Financial summary Revenue from Business Activities – Total], Data set, 2022, https://eikon. thomsonreuters.com/index.html.

- Thomson Reuters Eikon, [CARGILL Financial summary Revenue from Business Activities Total], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- Thomson Reuters Eikon, [COFCO CORP Financial summary Revenue from Business Activities – Total], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- Louis Dreyfus Company, 2022 Annual report, Rotterdam: Louis Dreyfus Company B.V., 2022, 12, https://www.ldc.com/annual-re-port-2022/.
- Thomson Reuters Eikon, [ADM Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- Thomson Reuters Eikon, [BUNGE Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- Javier Blas, "Look at All the Money Cargill Made," Bloomberg, October 7, 2022, https://www.bloomberg.com/opinion/articles/2022-10-07/commodities-look-at-all-the-money-cargillmade.
- "About COFCO", COFCO, accessed 18 December 2023, http:// www.cofco.com/en/AboutCOFCO/; following 2022 average exchange rate RMB/USD of 6,7328. https://www.exchange-rates. org/exchange-rate-history/usd-cny-2022
- Louis Dreyfus Company, 2022 Annual report, Rotterdam: Louis Dreyfus Company B.V., 2022, 13, https://www.ldc.com/annual-report-2022/.
- Not all companies publish data on their trading volume, or only publish data on specific categories of trading volume. There might, therefore, be some variation between the companies in the definitions of this category.
- Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 135.
- "Bunge Reports Fourth Quarter and Full-Year 2021 Results," Bunge, September 2, 2022, https://investors.bunge.com/investors/news-and-events/press-releases/year/2022/02-09-2022.
- "Our Business," Cargill, accessed May 29, 2023, https://www.cargill.com/transportation/our-business.
- "CHINADAILY: COFCO Group signs over \$10b worth in agreements", November 6, 2023, https://www.cofco.com/en/News/ Allnews/2023/1106/52923.html
- "Financial Information: Key Figures," Louis Dreyfus Company, accessed May 29, 2023, https://www.ldc.com/who-we-are/financial-information/key-figures/.
- ADM, 2022 Annual report, Chicago: ADM, 2022, 13, https://investors.adm.com/financials/annual-reports/default.aspx.
- Bunge, 2022 Annual report, St. Louis, Missouri: Bunge, 2022, 11, https://investors.bunge.com/investors/financial-information/annual-reports.
- "Cargill at a Glance," Cargill, accessed May 29, 2023, https:// www.cargill.com/about/cargill-at-a-glance.
- "Growing Together with Employees," COFCO, accessed May 29, 2023, http://www.cofco.com/en/CSR/WorkTogether/.
- "Financial Information: Key Figures," Louis Dreyfus Company, accessed May 29, 2023, https://www.ldc.com/who-we-are/financial-information/key-figures/.
- "ADM Opens Global Headquarters and Customer Center in Chicago," ADM, August 25, 2014, https://investors.adm.com/ news/news-details/2014/ADM-Opens-Global-Headquarters-and-Customer-Center-in-Chicago/default.aspx.
- Bunge, Registration Statement Under the Securities Act of 1933: Bunge Limited (U.S.: U.S. Securities and Exchange Commission, 2006), https://www.sec.gov/Archives/edgar/ data/1144519/000104746906014180/a2174668zposasr.htm.
- "Contact Us," Cargill, accessed May 29, 2023, https://www.cargill.com/page/cargill-contact-us.
- "Company Profile: COFCO Corporation," Bloomberg, accessed 29 May 2023, https://www.bloomberg.com/profile/company/1070Z:CH.

Hungry for profits 44

- "Company Profile: Louis Dreyfus Co BV," Bloomberg, accessed May 29, 2023, https://www.bloomberg.com/profile/company/0308213D:NA.
- Revenue in 2022 was 'only' US\$3 billion. "About Us," Agrocorp International, March 13, 2023, https://agrocorp.com.sg/ about-us-agrocorp/.
- Key focus on palm oil. "Homepages," Golden Agri-Resources, May 8, 2023, https://www.goldenagri.com.sg/.
- 37. Key focus on palm oil. "Home," Musim Mas, May 22, 2023, https://
- Brazil is their main market. "Home," Amaggi, November 1, 2022, https://www.amaggi.com.br/en/home-english/.
- Wilmar, 2022 Annual report, Singapore: Wilmar, 2022, 1 & 22, https://www.wilmar-international.com/annualreport2022/#contents.
- 40. "Olam: Achieving sustainable and deforestation-free supply chains for agricultural commodities," Satelligence, accessed June 6, 2023, https://satelligence.com/olam.
- 41. Wilmar, 2022 Annual report, Singapore: Wilmar, 2022, 197, https://www.wilmar-international.com/annualreport2022/#contents
- Olam, 2022 Annual Report, 2022, 6, https://www.olamgroup.com/ investors/annual-reports.html.
- 43. "Forging a better food system, together," Louis Dreyfus Company, October 12, 2022, https://www.ldc.com/stories-insights/forg-ing-a-better-food-system-together/.
- Jonathan C. Kingsman, Commodity conversations: an introduction to trading in agricultural commodities (California, US: CreateSpace, 2017), 3.
- Sophia Murphy, David Burch, and Jennifer Clapp, publication, Cereal Secrets: The World's Largest Grain Traders and Global Agriculture (Oxfam GB for Oxfam International, August 2012), 61, https://policy-practice.oxfam.org/resources/cereal-secrets-the-worlds-largest-grain-traders-and-global-agriculture-237131/.
- Fiona Harvey, "Record profits for grain firms amid food crisis prompt calls for windfall tax," The Guardian, August 23, 2022, https://www.theguardian.com/environment/2022/aug/23/record-profits-grain-firms-food-crisis-calls-windfall-tax.
- Cara Anna, and Vladimir Isachenkov, "Ukraine says grain coming to Somalia, but Russia skeptical," AP News, September 7, 2022, https://apnews.com/article/russia-ukraine-zelenskyy-putin-kenya-somalia-8bc64e0cc297l3d3cb43d6a8e386bedc.
- David Bicchetti, Carlos Razo, and Miho Shirotori, "Trade and food security: When an agreement delayed becomes a human right denied," UNCTAD, June 7, 2021, https://unctad.org/news/tradeand-food-security-when-agreement-delayed-becomes-human-right-denied.
- Most agricultural products are traded within the domestic market. For example, about 17% of cereal production is traded internationally, with shares for single commodities ranging from 9% for rice to 25% for wheat. OECD-FAO Agricultural Outlook 2021-2030, Chapter 3 – Cereals, 2021, https://www.oecd-ilibrary.org/ sites/d494ca9a-en/index.html?itemId=/content/component/ d494ca9a-en.
- 50. Cassio Gusson, "Agriculture giants team up on blockchain platform to track grains in Brazil," CoinTelegraph, October 16, 2020, https://cointelegraph.com/news/agriculture-giants-team-up-on-blockchain-platform-to-track-grains-in-brazil; Maria Afonso, "World Grains & Oilseeds Map 2021: New Demand Drivers, Political Tensions, and Weather Volatility," Rabobank, May, 2021, https://research.rabobank.com/far/en/documents/100762\_Rabobank\_Grains-and-Oilseeds-Map-2021\_Apr2021\_DIGITAL.pdf
- 51. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 158.
- 52. "Trase Yearbook 2020: The state of forest risk supply chains," Trase Insights, accessed May 29, 2023, https://insights.trase.earth/yearbook/highlights/traders-and-markets/.
- China imports more than half of the world's total trade in soya.
   Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 49.

- 54. ADM, Bunge, Cargill, Louis Dreyfus Company.
- 55. Brazil-China supply chain findings in Ernst Langthaler, "Great accelerations: soy and its global trade network,1950–2020," in The Age of the Soybean, edited by Claiton Marcio Da Silva, and Claudio de Majo, (Cambridgeshire: The White Horse Press, 2022), 65-90, https://www.jstor.org/stable/j.ctv309h1fx.10.
- 66. «Brazil: Bunge and Cargill, behind more than 30% of soy exports to EU and UK, allegedly linked to indigenous rights violations», August 19, 2023, https://www.business-humanrights.org/en/latest-news/brazil-bunge-and-cargill-behind-more-than-30-of-soy-exports-to-eu-and-uk-allegedly-linked-to-indigenous-rights-violations/; Case M.8199 BUNGE / EUROPEAN OILSEED PROCESSING FACILITIES, European Commission, February 6, 2017, https://ec.europa.eu/competition/mergers/cases/decisions/m8199\_596\_7.pdf, 9.
- «Report links Bunge to soy-related deforestation», June 23, 2023, https://www.feedandgrain.com/sustainability/news/15541156/ report-links-bunge-to-soyrelated-deforestation
- Case M.8199 BUNGE / EUROPEAN OILSEED PROCESSING FACILITIES, European Commission, February 6, 2017, https://ec.europa.eu/ competition/mergers/cases/decisions/m8199\_596\_7.pdf
- «Agricultural traders' second harvest», October 31, 2017, https://eu.boell.org/en/2017/10/31/agricultural-traders-second-harvest
- "Company Overview," Cargill, accessed May 29, 2023, https:// www.cargill.nl/en/company-overview.
- 61. "Fertilizers," ADM, accessed May 29, 2023, https://www.adm.com/en-us/products-services/industrial-biosolutions/products/fertilizers/; "Renewable Energy & Fuel," ADM, accessed May 29, 2023, https://www.adm.com/en-us/products-services/industrial-biosolutions/categories/renewable-energy-fuel/; "Fertilizer," Bunge, accessed May 29, 2023, https://www.bunge.com/our-businesses/fertilizer; "Sugar and bioenergy," Bunge, accessed May 29, 2023, https://www.bunge.com/our-businesses/sugar-and-bioenergy.
- 62. "Grandjoy," COFCO, accessed May 29, 2023, https://www.cofco.com/en/BrandProduct/COFCOLand/.
- "Pharmaceuticals & Cosmetics", accessed December 18, 2023, https://www.ldc.com/product/pharmaceuticals-cosmetics/
- 64. https://www.farmlandgrab.org/uploads/images/pho-tos/15646/original\_Screen\_Shot\_2021-12-03\_at\_1.57.32\_ PM.png?1638557886; "Iceland", accessed December 18, 2023, https://www.nationsonline.org/oneworld/iceland.htm
- "Agriculture > Arable land > Hectares: Countries Compared", accessed December 18, 2023, https://www.nationmaster.com/ country-info/stats/Agriculture/Arable-land/Hectares
- "Soya beans (soybeans), Imports and Exports, 2021," TrendEconomy, May 14, 2023, https://trendeconomy.com/data/commodity\_h2/1201.
- 67. Lucilio Alves, "Brazil may surpass the US and become the biggest corn exporter in the World," CEPEA, March 1, 2023, https://www. cepea.esalq.usp.br/en/opinion/brazil-may-surpass-the-usand-become-the-biggest-corn-exporter-in-the-world.aspx.
- A Japanse trading and investment business conglomerate with strong Japanese roots. https://www.marubeni.com/en/company/profile/
- "Dreyfus, COFCO head-to-head in Brazil soybean export rankings -data," Reuters, January 15, 2019, https://www.reuters.com/ article/brazil-grains-idINLINIZE162,
- A Brazilian agricultural commodity trader with strong Brazilian roots. https://www.amaggi.com.br/en/our-history/
- Canadian agricultural commodity trader. Acquired by Viterra in 2022. "Viterra Completes Its Acquisition of Gavilon," Viterra, October 3, 2022, https://www.viterra.com/Media/News/Viterra-completes-its-acquisition-of-Gavilon.
- "Cargill, Bunge lead Brazil grain shipments in 2019 shipping data," Reuters, January 9, 2020, https://www.reuters.com/article/ brazil-grains-idUKLIN29EITG.
- "Location," Bunge, accessed May 29, 2023, https://www.bunge.com/who-we-are/locations#.

- Bunge, 2022 Annual Report, St. Louis, Missouri: Bunge, 2023, F-72, https://investors.bunge.com/investors/financial-information/ annual-reports.
- Cargill, 2014 Annual Report: Value Chain, Brazil: Cargill, https:// www.cargill.com/static/brazil-annual-report/2014/en/07.htm.
- "COFCO Meat," COFCO, accessed May 29, 2023, https://www.cofco.com/en/BrandProduct/COFCOMeat/.
- 77. "Food for Thought: Alternative Proteins for the Future," Louis Dreyfus Company, September 20, 2022, https://www.ldc.com/stories-insights/food-for-thought-alternative-proteins-for-the-future/; "A big fat solution: Cargill partners with CUBIQ FOODS to bring innovative fats to plant-based food," Cargill, March 7, 2023, https://www.cargill.com/story/a-big-fat-solution-cargill-partners-with-cubiq-foods-to-bring; "Marel announces partnership with ADM to accelerate alternative protein innovation," PotatoPro, March 9, 2023, https://www.potatopro.com/news/2023/marel-announces-partnership-adm-accelerate-alternative-protein-innovation.
- 78. Frank Hollinger, Adam Gross, Makiko Toyoda, Crop Receipts: A New Financing Instrument For Africa, 2019, 42 https://documents1.worldbank.org/curated/pt/810431548672038875/pdf/134069-PUB-AFR-Crop-Receipts-PUBLIC.pdf; "The importance of tracing the supply chain", June 3, 2022, https://www.cofcointernational.com/newsroom/the-importance-of-tracing-the-supply-chain/; Louis Dreyfus Company, Sustainability Report 2019, https://www.ldc.com/wp-content/uploads/LDC\_2019-Sustainability-Report\_secured.pdf, 70.
- Bunge, 2022 Annual Report, St. Louis, Missouri: Bunge, 2023, 20, https://investors.bunge.com/investors/financial-information/ annual-reports.
- 80. COFCO took over Noble Agri and Nidera to ascertain a strong position in South America. Zhong Nan, "Chinese food trader COFCO aims to rival global giants," China Daily, June 15, 2016, https://www.chinadaily.com.cn/business/2016-06/15/content\_25714978. htm; Viterra took over Gavilon to gain presence in inter alia South America. Teodora Lyubomirova, "Grain giant: Viterra acquires Gavilon to gain 'presence in every major market'," Dairy Reporter, October 6, 2022, https://www.dairyreporter.com/Article/2022/10/06/grain-giant-viterra-acquires-gavilon-to-gain-presence-in-every-major-market.
- 81. Glencore Agriculture was rebranded Viterra in 2020. "Glencore Agriculture Rebrands to Viterra," Viterra, November 30, 2020, https://www.viterra.com/Media/News/Glencore-Agriculture-rebrands-to-Viterra. Recently, it was announced that Viterra and Bunge would merge in a stock and cash transaction.
- 82. COFCO International is the global trading arm of COFCO. "COFCO hires banks for trading arm IPO plan: Bloomberg", Reuters, March 15, 2021, https://www.reuters.com/article/us-cof-co-ipo-idUSKBN2B72L2/.
- 83. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 9.
- 84. "Policy to Entry", OECD Policy Roundtables, March 6, 2006, 9, https://www.oecd.org/daf/competition/36344429.pdf
- Phil Aikman, Alex Armstrong, Joel Finkelstein, Glenn Hurowitz, Etelle Higonnet, Mathew Jacobson, Liviya James, Deborah Lapidus, Julian Oram, Lucia von Reusner, and Anahita Yousef, rep., "Cargill: The Worst Company in the World," Mighty Earth, July, 2019, 88, https://t.co/JcelFr30iA.
- 86. Max van der Heijden, "Cargill een grote, maar niet onomstreden graangigant," Foodbusiness, September 13, 2022, https://www.foodbusiness.nl/ondernemen/artikel/10900556/cargill-een-grote-maar-niet-onomstreden-graangigant.
- Fariha Karim, "Aldi, Sainsbury's and Asda among supermarkets silent on deforestation links," The Times, December 2021, 2020, https://www.thetimes.co.uk/article/aldi-sainsburys-and-asda-among-supermarkets-silent-on-deforestation-links-xhxvpk8i6.
- 88. "A Supply Chain Collaboration," ADM, accessed 29 May, 2023, https://www.4flour.co.uk/a-supply-chain-collaboration/.
- "ECC allows import of 500,000 metric tons of wheat," *Tribune*, July 26, 2022, https://tribune.com.pk/story/2367900/ecc-allowsimport-of-500000-metric-tons-of-wheat.

- 90. "Louis Dreyfus Company Completes Strategic Partnership Agreement With ADQ", September 10, 2021, https://www.ldc.com/press-releases/louis-dreyfus-company-completes-strate-gic-partnership-agreement-with-adq/.
- "Stock Information", ADM, accessed December 19, 2023, https://investors.adm.com/stock-information/default.aspx; "Frequently Asked Questions: When did Bunge go public?", Bunge, accessed December 19, 2023, https://investors.bunge.com/investors/ir-resources/faq#when-did-bunge-go-public?
- 92. "Peek Inside America's Largest Privately Owned Company", Bloomberg, September 19, 2023, https://www.bloomberg.com/ opinion/articles/2023-09-19/peek-inside-cargill-s-cash-machine-as-america-s-largest-privately-owned-company; "Louis Dreyfus Company Completes Strategic Partnership Agreement With ADQ", September 10, 2021, https://www.ldc.com/press-releases/louis-dreyfus-company-completes-strategic-partnership-agreement-with-adq/.
- Agricultural Commodity Trading, September 2022, https://www. etcgroup.org/files/files/06\_agricultural\_commodity.pdf, 1 & 2.
- "COFCO hires banks for trading arm IPO plan: Bloomberg", Reuters, March 15, 2021, https://www.reuters.com/article/us-cof-co-ipo-idUKKBN2B72L2/.
- See for example: "Bunge Proxy Statement Notice of 2023 Annual General Meeting of Shareholders", March 31, 2023, https:// investors.bunge.com/sites/bungeltd-ir/files/2023-03/bunge-2023-proxy-statement.pdf, 5.
- 96. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 158.
- Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 70.
- 98. "COP26: Agricultural expansion drives almost 90 percent of global deforestation," FAO, November 6, 2021, https://www.fao.org/newsroom/detail/cop26-agricultural-expansion-drives-almost-90-percent-of-global-deforestation/en#:~text=Rome%20%E2%80%93%20Agricultural%20expansion%20drives%20almost,-Global%20Remote%20Sensing%20Survey%20today.
- 99. Ibid
- "Soy and Cattle Tracker," Mighty Earth, August 3, 2021, https://www.mightyearth.org/soy-and-cattle-tracker/.
- 101. "Learn the Effects of Deforestation," WWF, accessed June 5, 2023, https://www.wwf.org.uk/learn/effects-of/deforestation#:~text=But%20the%20risks%20from%20deforestation,around%20 10%25%20of%20global%20warming.
- 102. See for example: "Specific Instance To The Oecd National Contact Point Of The Netherlands", Center for Climate Crime Analysis, Deceber 1, 2022, https://climatecrimeanalysis.org/wp-content/uploads/2023/09/2022.12.01-Specific.Instance-LDC-Dutch. NCP-OECD.pdf
- "Food systems responsible for 'one third' of human-caused emissions", Carbon Brief, March 8, 2021,
- 104. See for example Oxfam's Behind the Brands campaign: "Change the Way the Food Companies That Make Your Favorite Brands Do Business.," Behind the Brands, accessed June 5, 2023, https://www.behindthebrands.org/.;"Nestlé and Unilever CEOs: we will make our supply chains deforestation-free", June 28, 2023, https://www.ft.com/content/d0224863-607l-436d-a628-d7f3a7lcb36f.
- 105. Ibid.
- 106. Thomson Reuters Eikon, [ADM Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- Thomson Reuters Eikon, [BUNGE Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- 108. For 2016-2019: Thomson Reuters Eikon, [CARGILL Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html. For 2020-2021 Bloomberg: https://www.bloomberg.com/news/articles/2021-08-06/crop-giant-cargill-reports-biggest-profit-in-156-year-history. For 2022: https://www.bloomberg.com/news/articles/2023-09-19/cargill-profit-drops-43-from-record-high-as-commodity-boom-fades

- 109. Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 29, https://www.ldc.com/annual-report-2022/; Louis Dreyfus Company, 2021 Annual Report, Rotterdam: Louis Dreyfus Company, 2021, 22, https://www.ldc.com/annual-report-2021/regions/; Louis Dreyfus Company, 2019 Annual Report, Rotterdam: Louis Dreyfus Company, 2019, 70, https://www.ldc.com/news-and-insights/reports-and-publications/; Louis Dreyfus Company, 2017 Annual Report, Rotterdam: Louis Dreyfus Company, 2017, 66, https://www.ldc.com/news-and-insights/reports-and-publications/.
- Li Xiaoyang, "Feeding Your Needs," Beijing Review, September 23, 2019, http://www.bjreview.com/Business/201909/t20190923\_800179091.html.
- 111. "COFCO's total profit made a record high in 2017," Chinatea, May 30, 2018, http://www.chinatea.com.cn/en/business/225.html; Based on the 2017 average RMB/Dollar exchange rate (1 dollar = 6.76 Yuan)
- Li Xiaoyang, "Feeding Your Needs," Beijing Review, September 23, 2019, http://www.bjreview.com/Business/201909/t20190923\_800179091.html.
- 113. "COFCO Listed on the Fortune Global 500 list for the 26th Consecutive Year," COFCO, April 12, 2020, http://www.cofco.com/en/News/Allnews/2020/1204/49828.html; Based on the 2019 average RMB/Dollar exchange rate (1 dollar = 6.91 Yuan.
- 114. COFCO International (@COFCOINTL). 2022. "#COFCO Corporation, our majority shareholder, announced record performance for 2021. Operating income exceeded USD 103.8 billion, up from USD 83 billion in 2020. Total profits exceeded USD 3.6 billion, up USD 377 million compared to 2020." Twitter, January 17, 2022, 10:04 a.m., https://twitter.com/COFCOINTL/status/1483017357454983169.
- 115. Ibid.
- 116. http://www.cofco.com/en/AboutCOFCO/; following 2022 average exchange rate RMB/USD of 6,7328. https://www.exchange-rates.org/exchange-rate-history/usd-cny-2022
- 117. COFCO's 2022 (net) profits have not yet been publicly disclosed.
- 118. Based on data from table X. We have not included Bunge's 2019 financial loss for this analysis as the financial loss for the year 2019 is due to a specific event and disproportionately affects the average net profit. "Impairment charges a drag on Bunge full-year results", World Grain, 02 February, 2020, https://www.world-grain.com/articles/13276-impairment-charges-a-drag-on-bunge-full-year-results
- Net Profit Margin, accessed December 18, 2023, Corporate Finance Institute, https://corporatefinanceinstitute.com/resources/accounting/net-profit-margin-formula/
- 120. "Agriculture sector: Preparing for disruption in the food value chain", McKinsey, May 11, 2020, https://www.mckinsey.com/ industries/agriculture/our-insights/agriculture-sector-preparing-for-disruption-in-the-food-value-chain.
- 121. Fiscal year ends May 31 and starts June 1.
- 122. We have excluded the 2019 negative profit margin of Bunge for this calculation as its 2019 financial loss is due to a specific event. It would have disproportionately affected the average net margin and would have provided a distorted picture. "Impairment charges a drag on Bunge full-year results", World Grain, 02 February, 2020, https://www.world-grain.com/articles/13276-impairment-charges-a-drag-on-bunge-full-year-results.
- 123. Based on revenues and net profits as reported in the numbers in the annex on individual companies.
- Russia invaded Ukraine on the 24th of February 2021: "Ukraine in maps: Tracking the war with Russia," BBC, accessed June 4, 2023, https://www.bbc.com/news/world-europe-60506682.
- 125. Olam, 2021 Annual Report, Singapore: Olam, 2021, 11, https://www.olamgroup.com/content/dam/olamgroup/investor-relations/ir-library/annual-reports/annual-reports-pdfs/2021/olam\_annual\_report\_2021.pdf
- 126. FAO Food Price Index overall unchanged in November, World Food Situation, Food and Agriculture Organization of the United Nations, December 12, 2023, https://www.fao.org/worldfoodsituation/foodpricesindex/en/; Data for average net profits of the ABCCD companies from "Figure X." We have not included Bunge's 2019 financial loss for this analysis as the financial loss for the year 2019 is due to a specific event and disproportion-

- ately affects the average net profit. Development of ABCCDs net profits for the period 2016-2022. As explained by FAO: The graph is an index of the international prices for a basket of traded (exported) agricultural commodities. It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups (meat, dairy, cereals, vegetables oils and sugar). The period 2014-2016 has been chosen (by FAO) as the benchmark (index=100).
- See for example research by Groundwork Collaborative Research, accessed December 18, 2023, https://endcorporateprofiteering.org/latest-research/
- 128. Viterra, 2022 Annual Report, 2022, 2, https://files.viterra.com.au/Full\_year\_report/2022/.
- 129. Fiona Harvey, "Record profits for grain firms amid food crisis prompt calls for windfall tax," The Guardian, August 23, 2022, https://www.theguardian.com/environment/2022/aug/23/record-profits-grain-firms-food-crisis-calls-windfall-tax.
- "What Makes a Market an Oligopoly?", Federal Reserve Bank of St. Louis, May 17, 2023, https://www.stlouisfed.org/open-vault/2023/may/what-makes-a-market-an-oligopoly.
- 131. Fiona Harvey, "Record profits for grain firms amid food crisis prompt calls for windfall tax," The Guardian, August 23, 2022, https://www.theguardian.com/environment/2022/aug/23/record-profits-grain-firms-food-crisis-calls-windfall-tax.
- 132. Wáng Shàoguāng, "In a Soybean Game Dominated by Capital, No One Wins," Read China, November 14, 2022, https://mronline. org/2022/11/21/in-a-soybean-game-dominated-by-capital-no-one-wins/.
- "Trase Yearbook 2020," Trase Insights, accessed June 4, 2023, https://insights.trase.earth/yearbook/highlights/traders-and-markets/.
- 134. "Trade and Development Update: Global Trends and Prospects," UNCTAD, accessed June 4, 2023, 20-23, https://unctad.org/system/files/official-document/gdsinf2023dl\_en.pdf.
- 135. Ibid, 23
- 136. Trade and Development Report 2023, UNCTAD, February 14, 2023, Chapter 3: Food Commodities, Corporate Profiteering and Crises: Revisiting the International Regulatory Agenda", 76, https://unct-ad.org/system/files/official-document/tdr2023ch3\_en.pdf.
- 137. "European food inflation hungry for profits?", Allianz Trade, April 14, 2023, https://www.econstor.eu/bitstream/10419/229186/1/ commodity-traders-in-a-storm-preprint.pdf,
- 138. "Trade and Development Update: Global Trends and Prospects," UNCTAD, accessed June 4, 2023, 22-23, https://unctad.org/sys-tem/files/official-document/gdsinf2023dl\_en.pdf.
- 139. Hope Shand, Kathy Jo Wetter, and Kavya Chowdhry, "Food Barons 2022," ETC Group, December 13, 2022, 7, 89 - 90, 97. https://etcgroup.org/content/food-barons-2022.
- 140. Joseph Baines & Sandy Brian Hager, "Commodity Traders in a Storm: Financialization: Corporate Power and Ecological Crisis", Allianz Trade, April 14, 2023, https://www.econstor.eu/ bitstream/10419/229186/1/commodity-traders-in-a-storm-preprint.pdf, 28
- ADM 22; Bunge 10; Cargill 25; COFCO 2; LDC 6. See https://competition-cases.ec.europa.eu/search.
- 142. "CARGILL / ADM CHOCOLATE BUSINESS", April 14, 2018, European Commission, https://competition-cases.ec.europa.eu/cases/M.7408
- 143. "Bunge, Viterra will merge to form \$34 billion agri-trading powerhouse", Reuters, June 1, 2023, https://www.reuters.com/ markets/deals/bunge-merge-with-viterra-form-18-billion-agriculture-trader-2023-06-13/.
- 144. Murky world of global food trading is too important to ignore, the Financial Times, June 20, 2023, https://www.ft.com/content/481f3646-6b0f-4512-a0f8-f4746fc4c7ab
- See for example: Bunge, 2022 Annual Report, St. Louise, Missouri: Bunge, 2022, 5-7, https://investors.bunge.com/sites/bungeltd-ir/files/2023-03/bunge-2022-annual-report.pdf.
- 146. "Soyven," Soyven, accessed June 4, 2023, https://www.soyven.com/.

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- 147. "ADM and Cargill complete agreement launching technology joint venture focused on farmer profitability," Cargill, accessed June 4, 2023, https://www.cargill.com/2019/adm-and-cargill-complete-agreement-launching-technology-joint.
- 148. Jennifer Marston, "Bushel acquires Cargill & ADM's GrainBridge," AFN, October 12, 2021, https://agfundernews.com/grainbridge-bushel-acquires-cargill-adm.
- 149. Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 56, https://www.ldc.com/annual-report-2022/; Bunge (2013) "Investments in Affiliates," Bunge, December 31, 2012, https://www.sec.gov/Archives/edgar/data/1144519/000104746913002069/R19.htm.
- 150. Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 56, https://www.ldc.com/annual-re-port-2022/; "Serviços Portuários," Cargill, accessed June 4, 2023, https://www.cargill.com.br/pt\_BR/servi%C3%A7os-portu%C3%A1rios. Original in Portuguese: "A companhia possui ainda joint venture com Louis Dreyfus Commodities para operação de grãos no Terminal Exportador de Santos (TES), em Santos (SP) e no Terminal Exportador do Guarujá (TEG), no Guarujá (SP), além do Terminal de Exportação de Açúcar do Guarujá (TEAG), também no Guarujá (SP), para exportação de açúcar."
- 151. John Reidy, "Innovafeed secures \$250 million in financing," World Grain, September 21, 2022, https://www.world-grain.com/articles/17493-innovafeed-secures-250-million-in-financing.
- 152. John Reidy, "Cargill, Innovafeed extend aquafeed agreement," World Grain, July 1, 2022, https://www.world-grain.com/articles/17117-cargill-innovafeed-extend-aquafeed-agreement; "InnovaFeed, ADM plan world's largest insect protein plant," All About Feed, November 24, 2020, https://www.allaboutfeed.net/all-about/new-proteins/innovafeed-adm-plan-worlds-largest-insect-protein-plant/.
- 153. Bunge, 2022 Annual Report, St. Louis, Missouri: Bunge, 2023, F-34, https://investors.bunge.com/investors/financial-information/ annual-reports. https://investors.bunge.com/sites/bungeltd-ir/ files/2023-03/bunge-2022-annual-report.pdf
- 154. "Covantis: Accelerate the transformation of global trade," Covantis, accessed June 4, 2023, https://covantis.io/. Ironically, the name of its technology partner is ConsensSys.
- 155. "Covantis launches as legal entity, announces CEO and executive appointments," Covantis, March 31, 2020, https://covantis.io/covantis-launches-as-legal-entity-announces-ceo-and-executive-appointments/.
- "Covantis is coming to Argentina & Uruguay," Covantis, February 21, 2023, https://covantis.io/covantis-is-coming-to-argentina-uruguay/.
- 157. Sayenko Kharenko, "Sayenko Kharenko advised ADM, Bunge, Cargill, COFCO, Louis Dreyfus Company and Glencore Agriculture in obtaining merger clearance for formation of a joint venture aiming to modernise global agriculture commodity trade operations," USUBC, September 7, 2020, https://www.usubc.org/site/recent-news/sayenko-kharenko-advised-adm-bunge-cargill--cofco-louis-dreyfus-company-and-glencore-agriculture-in-obtaining-merger-clearance-for-formation-of-a-joint-venture-aiming-to-modernise-global-agriculture-commodity-trade-operations.
- 158. Free translation from Portuguese: Grainrail.
- 159. "In Brazil's Amazon, Cargill grains ports meet local resistance", November 6, 2023, https://en.prothomalo.com/environment/ b2tfhs674d; "Brazil court upholds suspension of forest reduction for Ferrograo grain railway", June 1, 20203, https://www.reuters. com/business/environment/brazil-court-upholds-suspension-forest-reduction-ferrograo-grain-railway-2023-06-01/
- 160. Ana Mano, "Brazil's Amaggi and Big 4 grain traders mull road, railway venture," Reuters, March 11, 2019, https://www.reuters.com/article/brazil-logistics-idUKL1N20V06R; https://www.gov.br/cade/en/matters/news/cade-approves-firms2019-investment-agreement-to-acquire-stake-in-carguero-and-green-net "Ferrogrão: Weaknesses and Lessons Learned in Implementing a Sustainable Infrastructure Agenda," Climate Policy Initiative, accessed June 4, 2023.
- 161. Ana Mano, "Global traders propose road transportation JV in Brazil – statement," Reuters, February 17, 2023, https://www. nasdaq.com/articles/global-traders-propose-road-transpor-

- tation-jv-in-brazil-statement.; "Grupos do agro unem forças e criam empresa de logística", Valor Econômico, March 20, 2023, https://valor.globo.com/agronegocios/noticia/2023/03/20/grupos-do-agro-unem-forcas-e-criam-empresa-de-logistica. ahtml.
- 162. "Those who have market power can raise prices above what's considered fair market value, [...] We're at a point in our market concentrations that we haven't seen ever before.", Tom Perkins, "Revealed: Top US Corporations Raising Prices on Americans Even as Profits Surge," The Guardian, April 27, 2022, https://www.theguardian.com/business/2022/apr/27/inflation-corporate-america-increased-prices-profits.
- 163. Mike Leonard, "Approval of \$45 Million ADM Deal Ends Peanut Cartel Class Action," Bloomberg Law, July 28, 2021, https://news. bloomberglaw.com/antitrust/approval-of-45-million-adm-deal-ends-peanut-cartel-class-action.
- 164. Iulian Ernst, "Romania's competition body investigates possible collusion on sunflower oil, sugar and butter markets," Romania Insider, March 31, 2023, https://www.romania-insider.com/possible-collusion-oil-sugar-butter-romania-investigation.
- 165. Dan Papscun, "Cargill, Sanderson, Wayne to Pay \$85 Million in DOJ Settlement (2)," Bloomberg Law, July 25, 2022, https://news. bloomberglaw.com/antitrust/cargill-wayne-farms-sued-by-doj-for-sharing-wage-benefits-data.
- 166. Jonathan Stempel, "Lawsuit says Tyson, Cargill, JBS conspired to suppress beef prices paid to U.S. ranchers," Reuters, April 23, 2019, https://www.reuters.com/article/us-cattle-lawsuit-idUSKCNIR-Z2AO.
- 167. Mike Scarcella, "JBS to pay \$25 mln in latest beef price-fixing settlement in US court," Reuters, April 17, 2023, https://www. reuters.com/legal/litigation/jbs-pay-25-mln-latest-beef-price-fixing-settlement-us-court-2023-04-17/.
- 168. Jane Byrne, "Court decision looming in Cargill dispute with South Korean trade watchdog," Feed Navigator, May 15, 2017, https:// www.feednavigator.com/Article/2017/05/16/Court-decisionlooming-in-Cargill-dispute-with-South-Korean-trade-watchdog.
- 169. Alison Grant, "Cargill, Morton agree to \$11.5 million settlement in road salt price-fixing case," Cleveland, June 3, 2015, https://www. cleveland.com/metro/2015/06/cargill\_morton\_agree\_to\_115\_ se.html.
- 170. Brazil prosecutors seek \$2.5 bln in damages from alleged orange juice cartel, Reuters, April 7, 2023, https://www.reuters.com/ world/americas/brazil-prosecutors-seek-25-bln-damages-alleged-orange-juice-cartel-2023-04-06/
- 171. "CFTC Imposes \$720,000 Fine Against Two Chinese Firms for Wash Trading", FX Daily Report, September 24, 20122, https:// fxdailyreport.com/cftc-impose-a-720000-fine-against-twochinese-firms-for-wash-trading/
- 172. See for example Isabella M. Weber and Evan Wasner, "Sellers' Inflation, Profits and Conflict: Why can Large Firms Hike Prices in an Emergency?", Economic Department Working Paper Series, 2023, https://doi.org/10.7275/cbv0-gv07.
- 173. Ibid
- 174. Groundwork Collaborative Research, accessed December 18, 2023, https://endcorporateprofiteering.org/latest-research/
- 175. Isabella M. Weber and Evan Wasner, "Sellers' Inflation, Profits and Conflict: Why can Large Firms Hike Prices in an Emergency?" Prices in an Emergency?", Economic Department Working Paper Series, 2023, 5, https://doi.org/10.7275/cbv0-gv07.
- 176. "Grains Storage and Global Food Security," AMIS, accessed June, 4, 2023, 2, http://www.amis-outlook.org/fileadmin/user\_upload/ amis/docs/resources/Grains\_Storage\_and\_Global\_Food\_Security.pdf.
- 177. Li Lei, "China has 700 million metric tons of grain storage capacity," China Daily, May 11, 2023, https://www.chinadaily.com.cn/a/202305/11/WS645c8a2ba310b6054fad26ce.html; "Grains Storage and Global Food Security," AMIS, accessed June, 4, 2023, 2, http://www.amis-outlook.org/fileadmin/user\_upload/amis/docs/resources/Grains\_Storage\_and\_Global\_Food\_Security.pdf

- 178. Christophe Gouel and Nicolas Legrand, "The Role of Storage in Commodity Markets: Indirect Inference Based on Grains Data," CEPII, Working Paper, accessed June 4, 2023, 92, http://www.cepii.fr/PDF\_PUB/wp/2022/wp2022-04.pdf; "UNCTAD calls for a bold international economic agenda to avert another lost decade for developing countries, facing projected \$800bn in foregone income and battling unprecedented levels of debt distress", April 12, 2023, https://unctad.org/press-material/unctad-calls-bold-international-economic-agenda-avert-another-lost-decade-developing.
- 179. "Another Perfect Storm," IPES-Food, accessed June 4, 2023, 14, https://ipes-food.org/\_img/upload/files/AnotherPerfectStorm. pdf.
- 180. Akinwumi Adesina, "Averting an African food crisis: The African Emergency Food Production Facility," Africa Press Release, August 16, 2022, https://www.zawya.com/en/press-release/africa-press-releases/averting-an-african-food-crisis-the-african-emergency-food-production-facility-by-dr-akinwumi-a-adesina-vym3pgox.
- 181. Us: 30.403 million tons; Turkey: 20.200 million tons; United Kingdom 15.400 million tons. "Wheat consumption worldwide in 2021/2022, by country (in 1,000 metric tons)," Statista, accessed June 4, 2023, https://www.statista.com/statistics/1094065/total-global-wheat-consumption-by-country/.
- 182. Owned and leased.
- ADM, 2022 Annual Report, Chicago: ADM, 2022, 24-25, https://investors.adm.com/financials/annual-reports/default.aspx.
- Bunge, 2022 Annual Report, St. Louis, Missouri: Bunge, 2022, 26, https://investors.bunge.com/sites/bungeltd-ir/files/2023-03/ bunge-2022-annual-report.pdf.
- Cargill has not published information on its total storage capacity.
- "COFCO Corporation," Agropages, accessed June 4, 2023, https://www.agropages.com/CompanyDirectory/ Newslist-987-1 htm
- Louis Dreyfus Company has not published information on its worldwide total storage capacity.
- 188. ADM, 2022 Annual Report, Chicago: ADM, 2022, 47, https://investors.adm.com/financials/annual-reports/default.aspx; ADM, 2022 Annual Report, Chicago: ADM, 2022, 30, https://investors.adm.com/financials/annual-reports/default.aspx.
- 189. Bunge, 2022 Annual Report, St. Louis, Missouri: Bunge, 2022, 42 https://investors.bunge.com/sites/bungeltd-ir/files/2023-03/ bunge-2022-annual-report.pdf; Bunge, 2020 Annual Report, St. Louis, Missouri: Bunge, 2020, 26, https://investors.bunge.com/ sites/bungeltd-ir/files/2020ar.pdf.
- 190. Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 41, https://www.ldc.com/annual-re-port-2022/; Louis Dreyfus Company, 2020 Annual Report, Rotterdam: Louis Dreyfus Company, 2020, 24, https://www.ldc.com/annual-report-2020/; Louis Dreyfus Company, 2019 Annual Report, Rotterdam: Louis Dreyfus Company, 2019, 99, https://www.ldc.com/news-and-insights/reports-and-publications/; Louis Dreyfus Company, 2017 Annual Report, Rotterdam: Louis Dreyfus Company, 2017, 69, https://www.ldc.com/news-and-insights/reports-and-publications/.
- 191. Wilmar, 2022 Annual Report, Singapore: Wilmar, 2022, 111, https://www.wilmar-international.com/annualreport2022/; Wilmar, 2020 Annual Report, Singapore: Wilmar, 2020, 94, https://www.wilmar-international.com/annualreport2020/; Wilmar, 2018 Annual Report, Singapore: Wilmar, 2018, 95, https://www.wilmar-international.com/annualreport2018/.
- Olam, 2022 Annual Report, 2022, 185, https://www.olamgroup.com/investors/annual-reports.html; Olam, 2020 Annual Report, accessed December 20, 2023, 16, https://www.olamgroup.com/investors/annual-reports.html; Olam, 2018 Annual Report, accessed December 20, 2023, 17, https://www.olamgroup.com/investors/annual-reports.html.
- 193. Viterra, 2022 Annual Report, 2022, 29, https://files.viterra.com. au/Full\_year\_report/2022/; Viterra, 2020 Annual Report, 2020, 16, https://www.viterra.com/dam/jcr:5e692425-6bda-4cbe-98bc-8d39462750a/Annual-report-2020-.pdf; Viterra, 2019 Annual Report, 2019, 13, https://www.viterra.com/dam/jcr:232dadd2-c85e-4e79-9ef3-886d3af27755/Annual-report-2019.pdf.

- 194. Based on data from figure 7.
- 195. Agricultural commodity traders are not the only ones involved in food speculation. Investigators from "Unearthed" and "Lighthouse Reports' found that several hedge funds made an estimated US\$1.9 billion in trading profits on the food price spike at the start of the Ukraine war. Alice Ross et al., "Cargill: The Company Feeding the World by Helping Destroy the Planet," Unearthed Greenpeace, November 26, 2020, https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/; Ludo Hekman, Margot Gibbs, Thin Lei Win, Kabir Agarwal, Lise Witterman, Beatriz Ramalho da Silva, Lionel Faull, Nils Klawitter, Sipho Kings, "The Hunger Profiteers," Lighthouse Reports, March 5, 2023, https://www.lighthousereports.com/investigation/the-hunger-profiteers/.
- 196. Lukas Kornher, Joachim von Braun and Bernardina Algieri, "Speculation risks in agricultural commodity markets in the context of the 2022 price spikes: Implications for policy," Center for Development Research, Policy Brief No. 40, accessed June 4, 2023, 1-5, https://www.zef.de/fileadmin/user\_upload/ZEF\_Policy\_Brief\_40\_eng-\_27\_4\_2022.pdf.
- 197. Carlos Mera and Andrew Rawlings, "Food Price Surge Is Unlikely to Revert," Rabobank, accessed June 4, 2023, https://research. rabobank.com/far/en/sectors/agri-commodity-markets/foodprice-surge-is-unlikely-to-revert.html.
- "CFTC Orders Two Chinese Companies to Pay \$720,000 for Wash Trading, Position Limit Violations, and Reporting Failures," CFTC, September 23, 2022, https://www.cftc.gov/PressRoom/PressReleases/8592-22.
- 199. Carlos Mera and Andrew Rawlings, "Food Price Surge Is Unlikely to Revert," Rabobank, accessed June 4, 2023, https://research. rabobank.com/far/en/sectors/agri-commodity-markets/foodprice-surge-is-unlikely-to-revert.html
- Inter alia investment firms, investment funds, other financial institutions and non-hedging commercials.
- 201. See for example Kabir Agarwal, Thin Lei Win and Margot Gibbs, "Betting on Hunger': Market Speculation is Contributing to Global Food Insecurity," *The Wire*, May 6, 2022, https://thewire.in/economy/speculation-is-contributing-to-global-food-insecurity-significantly.
- Roman Herre, "Agricultural traders' second harvest," Heinrich-Böll-Stiftung, October 31, 2017, https://eu.boell.org/en/2017/10/31/ agricultural-traders-second-harvest.
- Trade and Development Report 2023, UNCTAD, February 14, 2023, Chapter 3: Food Commodities, Corporate Profiteering and Crises: Revisiting the International Regulatory Agenda", 79, https://unctad.org/system/files/official-document/tdr2023ch3\_en.pdf.
- 204. Sophie van Huellen & Tomaso Ferrando, "Who is profiting from the food crisis? Speculation, rent-seeking and rent-extraction in our food sector", December 19, 2023, https://left.eu/study-exposes-corporate-profiteering-from-food-price-crisis/.
- Jonathan C. Kingsman, Commodity conversations: an introduction to trading in agricultural commodities (California, US: CreateSpace, 2017), 72-82.
- 206. Ibid
- Craig Pirrong, "The Economics of Commodity Trading Firms," Trafigura, accessed June 4, 2023, 11, https://www.trafigura.com/media/1488/2014\_trafigura\_the\_economics\_of\_commodity\_trading\_firms\_section\_v\_english.pdf.
- 208. "Consolidation: Fewer, large companies dominate global value chains," *Public* Eye, accessed June 4, 2023, https://www.public-eye.ch/en/topics/soft-commodity-trading/trends-and-developments-in-the-global-agro-food-sector/consolidation-fewer-large-companies-dominate-global-value-chains.
- Barbara Kuepper and Diana Quiroz, "Belgian Consumption of Sugarcane Ethanol from Brazil and Peru," Oxfam, March 30, 2023, 29–30, https://profundo.nl/download/ethanol-brazil-and-perueng-march-2023-final.
- "Ethanol vs sugar: the price relationship that keeps Brazil's sugar market guessing," Czarnikow, accessed February 8, 2021, https:// www.czarnikow.com/blog/brazil-sugar-market-ethanol-sugar.
- 211. Ibid.

- Topper Sherwood, "'Vertical integration' creates new class of sugar traders," Sugar Economics and Business, accessed June 4, 2023, https://toppersherwood.com/wp-content/up-loads/2015/11/SugarIndustry2015.pdf.
- 213. "A global food crisis", World Food Programme, accessed December 18, 2023, https://www.wfp.org/global-hunger-crisis
- 214. Fiona Harvey, "Record profits for grain firms amid food crisis prompt calls for windfall tax," *The Guardian*, August 23, 2022, https://www.theguardian.com/environment/2022/aug/23/record-profits-grain-firms-food-crisis-calls-windfall-tax.
- 215. Wáng Shàoguāng, "In a Soybean Game Dominated by Capital, No One Wins," Read China, November 14, 2022, https://mronline. org/2022/11/21/in-a-soybean-game-dominated-by-capital-no-one-wins/.
- 216. Trade and Development Report 2023, UNCTAD, February 14, 2023, Chapter 3: Food Commodities, Corporate Profiteering and Crises: Revisiting the International Regulatory Agenda", 78, https://unct-ad.org/system/files/official-document/tdr2023ch3\_en.pdf.
- 217. "Bunge, Viterra will merge to form \$34 billion agri-trading power-house", Reuters, June 1, 2023, https://www.reuters.com/markets/deals/bunge-merge-with-viterra-form-18-billion-agriculture-trader-2023-06-13/.
- 218. "Those who have market power can raise prices above what's considered fair market value, [...] We're at a point in our market concentrations that we haven't seen ever before.", Tom Perkins, "Revealed: Top US Corporations Raising Prices on Americans Even as Profits Surge," The Guardian, April 27, 2022, https://www.theguardian.com/business/2022/apr/27/inflation-corporate-america-increased-prices-profits.
- Isabella M. Weber and Evan Wasner, "Sellers' Inflation, Profits and Conflict: Why can Large Firms HikePrices in an Emergency?", Economic Department Working Paper Series, 2023, 7, https://doi. org/10.7275/cbv0-gv07.
- 220. US: 30.403 million tons; Turkey: 20.200 million tons; United Kingdom 15.400 million tons. "Wheat consumption worldwide in 2021/2022, by country (in 1,000 metric tons)," Statista, accessed June 4, 2023, https://www.statista.com/statistics/1094065/total-global-wheat-consumption-by-country/
- 221. "Commodity trading firms have assumed many financing, insurance and investment functions typically associated with the activity of banks. In this context, very large international trading firms, or ABCD-type companies have come to occupy a privileged position in terms of setting prices, accessing funding, and participating directly in the financial markets. This not only enables speculative trades in organized market platforms, but a growing volume of transactions between individuals, or over-the-counter trades, over which most governments in the advanced countries have no authority or control." Trade and Development Report 2023, UNCTAD, February 14, 2023, Chapter 3: Food Commodities, Corporate Profiteering and Crises: Revisiting the International Regulatory Agenda", 77, https://unctad.org/system/files/official-document/tdr2023ch3\_en.pdf.
- "International Competition Network", accessed December 21, 2023, https://www.internationalcompetitionnetwork.org/
- 223. "Another Perfect Storm?", IPES-Food, May 2022, 14, https://ip-es-food.org/\_img/upload/files/AnotherPerfectStorm.pdf
- 224. Trade and Development Report 2023, UNCTAD, February 14, 2023, Chapter 3: Food Commodities, Corporate Profiteering and Crises: Revisiting the International Regulatory Agenda", 97, https://unct-ad.org/system/files/official-document/tdr2023ch3\_en.pdf.
- "Grains Storage and Global Food Security," AMIS, accessed June, 4, 2023, 8, http://www.amis-outlook.org/fileadmin/user\_upload/ amis/docs/resources/Grains\_Storage\_and\_Global\_Food\_Security.pdf.
- Trade and Development Report Update: Global Trends and Prospects, UNCTAD, April 2023, 22 https://unctad.org/system/ files/official-document/gdsinf2023d1\_en.pdf.
- 227. Ibid., 22-23
- Trade and Development Report Update: Global Trends and Prospects, UNCTAD, April 2023, 22-23 https://unctad.org/system/files/official-document/gdsinf2023d1\_en.pdf

- 229. Trade and Development Report 2023, UNCTAD, February 14, 2023, Chapter 3: Food Commodities, Corporate Profiteering and Crises: Revisiting the International Regulatory Agenda", 92, https://unctad.org/system/files/official-document/tdr2023ch3\_en.pdf.
- Manon François, Carlos Oliveira, Bluebery Planterose, Gabriel Zucman, "A Modern Excess Profit Tax", EU Tax Observatory, November 2022, https://gabriel-zucman.eu/files/FOPZ2022.pdf.
- Global impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation, UN Global Crisis Response Group on Food, Energy and Finance, June 8, 2022. Brief No. 2, 3, https://unctad.org/system/files/official-document/ungcrq-ukraine-brief-no-2\_en.pdf
- 232. Ibid., 9.
- "ADM Company Profile," ADM, accessed June 6, 2023, https://www.adm.com/en-us/about-adm/our-company/.
- 234. "The History of ADM," ADM, accessed June 6, 2023, https://www.adm.com/en-us/about-adm/our-company/history/.
- "ADM History and Founders," ADM, accessed June 6, 2023, https://www.adm.com/en-us/about-adm/our-company/history/.
- Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 135.
- 237. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 136.
- Javier Blas, and Jack Farchy, The World for Sale: Money, Power and the Traders Who Barter the Earth's Resources (Manhattan: Random House, 2021), 254.
- 239. Kurt Eichenwald, "Archer Daniels Settles Suit Accusing It of Price Fixing," The New York Times, June 18, 2004, https://www.nytimes. com/2004/06/18/business/archer-daniels-settles-suit-accusing-it-of-price-fixing.html.
- 240. Total revenue from business activities.
- Thomson Reuters Eikon, [ADM Financial summary Revenue from Business Activities – Total], Data set, 2022, https://eikon. thomsonreuters.com/index.html.
- 242. Thomson Reuters Eikon, [ADM Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- 243. ADM, Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.): Archer-Daniels-Midland (U.S.: U.S. Securities and Exchange Commission, 2023), 38, https://investors.adm.com/financials/sec-filings/default.aspx.
- 244. ADM, Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.): Archer-Daniels-Midland (U.S.: U.S. Securities and Exchange Commission, 2023), 62, https://investors.adm.com/financials/sec-filings/default.aspx.
- 245. Thomson Reuters Eikon, [ADM Financial summary Revenue from Business Activities Total], Data set, 2022, https://eikon.thomsonreuters.com/index.html; Thomson Reuters Eikon, [ADM Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html
- 246. ADM, Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.): Archer-Daniels-Midland (U.S.: U.S. Securities and Exchange Commission, 2022), 34, https://investors.adm.com/financials/sec-filings/default.aspx; ADM, 2021 Annual Report, Chicago: ADM, 2021, 7, https://investors.adm.com/financials/annual-reports/default.aspx.
- 247. "Unlocking Nature. Enriching Life. First Quarter 2021 Investor Overview Handout", ADM, accessed May 30, 2023, slide 6, https://sl.q4cdn.com/365366812/files/js/pdf-js/viewer. html?file=https%3A%2F%2Fs1.q4cdn.com%2F365366812%2F-files%2Fdoc\_presentation%2F2021%2F03%2FADM-Investor-Overview-Handout-2021-Q1.pdf.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 4, https://investors. adm.com/financials/annual-reports/default.aspx.
- 249. Described by ADM as: "[G]lobal activities related to the origination, merchandising, transportation, and storage of agricultural raw materials, and the crushing and further processing of oilseeds such as soybeans and soft seeds (cottonseed, sunflower

- seed, canola, rapeseed, and flaxseed) into vegetable oils and protein meals.". ADM, 2021 Annual Report, Chicago: ADM, 2021, 5, https://investors.adm.com/financials/annual-reports/default. aspx.
- 250. The business activities of this segment are to convert corn and wheat into products and ingredients used in the food and beverage industry including sweeteners, corn and wheat starches, syrup, glucose, wheat flour, and extrose. ADM, 2021 Annual Report, Chicago: ADM, 2021, 6, https://investors.adm.com/financials/annual-reports/default.aspx.
- 251. This segment serves various end markets including food, beverages, nutritional supplements, and feed and premix for livestock, aquaculture, and pet food. "Human Nutrition," ADM, accessed June 6, 2023, https://www.adm.com/en-us/products-services/human-nutrition/.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 30, https://investors.adm.com/financials/annual-reports/default.aspx.
- ADM, 2022 Annual Report, Chicago: ADM, 2021, 5, https://www.sec.gov/Archives/edgar/data/7084/00000708423000010/adm-20221231.htm.
- 254. Europe, the Middle East, Africa, and India.
- 255. Relative to capacity in terms of metric tons.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 23-24, https://investors.adm.com/financials/annual-reports/default.aspx.
- 257. Ibid.
- 258. Ibid.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 7, https://investors. adm.com/financials/annual-reports/default.aspx.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 30, https://investors.adm.com/financials/annual-reports/default.aspx.
- ADM, "Connecting the Harvest to the Home," ADM Assets, 2016, https://assets.adm.com/Careers/Harvest-to-Home.pdf.
- "Fatty Acid Methyl Esters (FAME) Fact Sheet," ETIP Bioenergy, accessed May 30, 2023, https://www.etipbioenergy.eu/index. php?option=com\_content&view=article&id=330.
- 263. Meghan Sapp, "ADM's German Biodiesel Exports Account for Majority of Us January Imports," Biofuels Digest, April 11, 2023, https://www.biofuelsdigest.com/bdigest/2023/04/11/adms-ger-man-biodiesel-exports-account-for-majority-of-us-january-imports/.
- 264. Neeley, T. (2020) "Iowa, Wisconsin Ethanol Plants Sue ADM", DTN Progressive Farmer, 13 November. Available at: https://www.dtnpf.com/agriculture/web/ag/news/business-inputs/article/2020/11/13/six-ethanol-companies-file-new-anti (Accessed: 13 April 2023).
- 265. It furthermore leases approximately 780 barges, 17,500 rail cars, 290 trucks, 370 trailers, 30 boats, and 28 oceangoing vessels. ADM, 2021 Annual Report, Chicago: ADM, 2021, 22, https://investors.adm.com/financials/annual-reports/default.aspx
- 266. "Unlocking Nature. Enriching Life. First Quarter 2021 Investor Overview Handout", ADM, accessed May 30, 2023, slide 17, https://sl.q4cdn.com/365366812/files/js/pdf-js/viewer. html?file=https%3A%2F%2Fsl.q4cdn.com%2F365366812%2F-files%2Fdoc\_presentation%2F2021%2F03%2FADM-Investor-Overview-Handout-2021-Ql.pdf; ADM, 2021 Annual Report, Chicago: ADM, 2021, 22, https://investors.adm.com/financials/annual-reports/default.aspx.
- "ADM, Cargill Complete Agreement for Soybean Joint Venture in Egypt," ADM, July 2, 2018, https://www.adm.com/en-us/news/news-releases/adm-cargill-complete-agreement-for-soybean-joint-venture-in-egypt/; ADM, 2021 Annual Report, Chicago: ADM, 2021, 5, https://investors.adm.com/financials/annual-reports/default.aspx.
- "Olenex: Het Beste van Twee Werelden," MVO, February 20, 2023, https://mvo.nl/organisatie/leden/olenex.
- 269. Olenex Holdings B.V., 2021, page 3.
- 270. "About Us," Olenex, December 1, 2022, https://olenex.com/about-us/.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 5, https://investors. adm.com/financials/annual-reports/default.aspx.

- 272. Olenex Holdings B.V., 2021, 5.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 5, https://investors. adm.com/financials/annual-reports/default.aspx.
- ADM, 2021 Annual Report, Chicago: ADM, 2021, 13, https://investors.adm.com/financials/annual-reports/default.aspx
- 275. "Bunge Announces Proposed Change in Place of Incorporation from Bermuda to Switzerland," Bunge, December 8, 2022, https://www.bunge.com/news/bunge-announces-proposed-change-place-incorporation-bermuda-switzerland.
- 276. "Our History," Bunge, accessed May 30, 2023, https://www.bunge.com/who-we-are/our-history.
- 277. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 148.
- 278. "Our History," Bunge, accessed May 30, 2023, https://www.bunge.com/who-we-are/our-history.
- 279. "Bunge Announces Proposed Change in Place of Incorporation from Bermuda to Switzerland," Bunge, December 8, 2022, https://www.bunge.com/news/bunge-announces-proposed-change-place-incorporation-bermuda-switzerland.
- 280. "Bunge Reports Fourth Quarter and Full-Year 2022 Results," Bunge, February 8, 2023, https://investors.bunge.com/investors/ news-and-events/press-releases/year/2023/02-08-2023.
- 281. During the 1990s Bunge y Born had cement, paint, textile and operations located in Argentina, Brazil, Uruguay, Paraguay, Peru and Venezuela. Source: Nathaniel C. Nash, "...Today's Corporate Game Plans Know No Boundaries: Bunge & Born; More Mindful Of Latin America," The New York Times, January 3, 1994, sec. C, 5; "Our History," Bunge, accessed May 30, 2023, https://www.bunge.com/who-we-are/our-history.
- 282. "International Briefs; Imperial Chemical Buys Latin Paint Company," The New York Times, March 5, 1996, sec. D, 9.
- "Agribusiness," Bunge, accessed June 6, 2023, https://www. bunge.com/our-businesses/oilseeds.
- Bunge, 2021 Annual Report, St. Louis, Missouri: Bunge, 2021, F-66, https://investors.bunge.com/investors/financial-information/ annual-reports.
- 285. "Agribusiness," Bunge, accessed June 6, 2023, https://www.bunge.com/our-businesses/oilseeds.
- 286. "Locations," Bunge, accessed June 6, 2023, https://www.bunge.com/who-we-are/locations; "Where We Are," Bunge, accessed June 6, 2023, https://www.bunge.com/where-we-are#.
- 287. Bunge's total storage capacity for Agricultural services (owned + leased) was 14,571,829 metric tons in the 2021 FY. Bunge, 2021 Annual Report, St. Louis, Missouri: Bunge, 2021, 23, https://investors.bunge.com/investors/financial-information/annual-reports.
- Bunge, 2021 Annual Report, St. Louis, Missouri: Bunge, 2021, 23, https://investors.bunge.com/investors/financial-information/annual-reports.
- Bunge, 2021 Annual Report, St. Louis, Missouri: Bunge, 2021, 24, https://investors.bunge.com/investors/financial-information/annual-reports.
- 290. Ibid.
- Bunge, 2021 Annual Report, St. Louis, Missouri: Bunge, 2021, 23-24, https://investors.bunge.com/investors/financial-information/ annual-reports.
- 292. "Locations," Bunge, accessed June 6, 2023, https://www.bunge.com/who-we-are/locations; "Where We Are," Bunge, accessed June 6, 2023, https://www.bunge.com/where-we-are#.
- Bunge, 2021 Annual Report, St. Louis, Missouri: Bunge, 2021, 10, https://investors.bunge.com/investors/financial-information/annual-reports
- 294. Ibid
- 295. See Figure X. Thomson Reuters Eikon, Data set, https://eikon. thomsonreuters.com/index.html.
- Bunge, 2010 Annual Report, New York: Bunge, 2010, 25, https://investors.bunge.com/investors/financial-information/annual-reports.

- 297. Including a US\$1,673 million (sale of Sugar & Bioenergy operations) and US\$108 million goodwill impairment charge, among others. Eric Schroeder, "Major Accounting Charges Drag down Bunge Earnings," Food Business News, November 6, 2019, https://www.foodbusinessnews.net/articles/14801-major-accounting-charges-drag-down-bunge-earnings.
- Thomson Reuters Eikon, [BUNGE Financial summary Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html.
- 299. Thomson Reuters Eikon, [BUNGE Financial summary Revenue from Business Activities Total], Data set, 2022, https://eikon.thomsonreuters.com/index.html; Thomson Reuters Eikon, [BUNGE Income before Discontinued Operations and Extraordinary Items], Data set, 2022, https://eikon.thomsonreuters.com/index.html
- 300. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 8.
- Andrea Murphy, "America's Largest Private Companies," Forbes, December 1, 2022, https://www.forbes.com/consent/ ketch/?toURL=https%3A%2F%2Fwww.forbes.com%2Flists%2Flargest-private-companies%2F.
- 302. In this subchapter, we refer to the financial years based on Cargill's financial calendar (the fiscal year ends in May). For example, 2022 refers to the fiscal year beginning June 1, 2021 and ending May 31, 2022.
- Javier Blas, "Look at All the Money Cargill Made," Bloomberg, October 7, 2022, https://www.bloomberg.com/opinion/articles/2022-10-07/commodities-look-at-all-the-money-cargillmade.
- 304. "Cargill at a Glance," Cargill, accessed June 6, 2023, https://www.cargill.com/about/cargill-at-a-glance.
- "Contact Us," Cargill, accessed June 6, 2023, https://www.cargill. com/page/cargill-contact-us.
- 306. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 155-156.
- "Our History," Cargill, accessed June 6, 2023, https://www.cargill. com/about/cargill-history.
- Javier Blas, and Jack Farchy, The World for Sale: Money, Power and the Traders Who Barter the Earth's Resources (Manhattan: Random House, 2021), 29-31.
- "Cargill Timeline," Cargill, accessed June 6, 2023, https://www.cargill.com/about/cargill-timeline; Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 157.
- 310. In the worldwide country GDP ranking, following Cargill's revenue, it would hold position 58. Based on 2020/2021 GDP figures, Cargill has a larger turnover than the GDP of more than two third of the world's countries. https://data.worldbank.org/indicator/NY.GDP. MKTP.CD?most\_recent\_value\_desc=true
- 311. Statista an online platform that provides databases and analyses of market and consumer insights. Cargill (2021) Revenue and Profit of Agricultural Company Cargill Worldwide from 2010 to 2021 (In Million U.S. Dollars). Cargill, "Revenue and profit of agricultural company Cargill worldwide from 2010 to 2021 (in million U.S. dollars)," Chart, August 1, 2021, https://www.statista.com/statistics/274778/revenue-and-profit-of-cargill-agricultural-company /; Javier Blas, "Look at All the Money Cargill Made," Bloomberg, October 7, 2022, https://www.bloomberg.com/opinion/articles/2022-10-07/commodities-look-at-all-the-money-cargill-made.
- 312. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 158.
- "Fitch Rates Cargill's Senior Notes Offering 'A,"" Fitch Ratings, November 8, 2021, https://www.fitchratings.com/research/ corporate-finance/fitch-rates-cargill-senior-notes-offering-a-08-11-2021.
- "Land Rights," Cargill, accessed June 6, 2023, https://www.cargill.com/news/land-rights.
- "Cargill Revenues Reach Record Levels in 2022," International Leather Maker, August 15, 2022, https://internationalleathermaker.com/cargill-revenues-reach-record-levels-in-2022/.

- 316. Cargill (2021) Revenue and Profit of Agricultural Company Cargill Worldwide from 2010 to 2021 (In Million U.S. Dollars). Cargill, "Revenue and profit of agricultural company Cargill worldwide from 2010 to 2021 (in million U.S. dollars)," Chart, August 1, 2021, https://www.statista.com/statistics/274778/revenue-and-profit-of-cargill-agricultural-company ; Cargill, 2022 Annual Report, Minneapolis: Cargill, 2022, https://www.cargill.com/about/2022-annual-report.
- 317. Cargill, 2022 Annual report, Minneapolis: Cargill, 2022, https://www.cargill.com/about/2022-annual-report. ADM's 2021 report contained 224 pages. ADM, 2021 Annual Report, Chicago: ADM, 2022, https://investors.adm.com/financials/annual-reports/default.aspx; Bunge's annual report for 2022 contained 158 pages. Bunge, 2022 Annual Report, St. Louis, Missouri: Bunge, 2023, https://investors.bunge.com/investors/financial-information/annual-reports.
- 318. "Trade and Development Update: Global Trends and Prospects," UNCTAD, accessed June 4, 2023, 21, note 3, https://unctad.org/system/files/official-document/gdsinf2023d1\_en.pdf.
- Environmental, Social and Governance report. Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 95, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf.
- 320. "Company Overview," Cargill, accessed June 6, 2023, https://www.cargill.com/about/company-overview.
- "Company Overview," Cargill Netherlands, accessed June 6, 2023, https://www.cargill.nl/en/company-overview.
- 322. "Sustainable Soy," Cargill, accessed June 4, 2023, https://www.cargill.com/sustainability/sustainable-soy.
- 323. Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 135-136, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf.
- 324. "Cargill, Bunge lead Brazil grain shipments in 2019 shipping data," Reuters, January 9, 2020, https://www.reuters.com/article/ brazil-grains-idUKL1N29EITG.
- 325. "Cargill, Bunge lead Brazil grain shipments in 2019 -shipping data," Reuters, January 9, 2020, https://www.reuters.com/article/brazil-grains-idUKLIN29EITG.
- 326. Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 135, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf.
- Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 95, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf.
- "Top 5 Companies Leading the Sustainability of the Global Palm Kernel Oil Market," Expert Market Research, September 9, 2022, https://www.expertmarketresearch.com/articles/top-palm-ker-nel-oil-companies.
- Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 116, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf.
- Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 115-116, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf; "Palm oil assessment," SPOTT, accessed June 4, 2023, https://www.spott.org/palm-oil/cargill-inc/date/june-2017/.
- Cargill, 2022 ESG report, Minneapolis: Cargill, 2022, 115, https://www.cargill.com/doc/1432219233265/2022-esg-report-all.pdf.
- 332. "Company Overview," Cargill, accessed June 4, 2023, https://www.cargill.com/about/company-overview.
- 333. "About us," Cargill, accessed June 4, 2023, https://www.cargill.com/animal-nutrition/about-us.
- 334. "Top 10 Largest Animal Feed Manufacturers in the World 2022, Top Animal Feed Companies," BizVibe, September 1, 2022, https://blog.bizvibe.com/blog/food-beverages/top-animal-feed-manufacturers
- 335. Cargill, "Cargill reports fiscal 2017 fourth-quarter and full-year results," PR Newswire, July 13, 2017, https://www.prnewswire.com/news-releases/cargill-reports-fiscal-2017-fourth-quarter-and-full-year-results-300487641.html; Cargill, "Cargill reports fiscal 2018 fourth-quarter and full-year results," Cargill News, accessed June 4, 2023, https://www.cargill.com/2018/cargill-reports-fiscal-2018-fourth-quarter-and-full-year-results; Cargill, "Cargill reports fiscal 2019 fourth-quarter and full-year results," Cargill News, accessed June 4, 2023, https://www.cargill.com/2019/cargill-reports-fiscal-2019-fourth-quarter-and-full-year-results.

- 336. "About us," Cargill, accessed June 4, 2023, https://www.cargill.com/animal-nutrition/about-us.
- 337. "Company Overview," Cargill, accessed June 4, 2023, https://www.cargill.com/about/company-overview.
- 338. "Jon Nash," Cargill, June 4, 2023, https://www.cargill.com/about/jon-nash.
- 339. "Sustainable beef," Cargill, accessed June 4, 2023, https://www.cargill.com/sustainability/sustainable-beef; "US & Canada Protein Processing Locations," Cargill, accessed June 4, 2023, https://careers.cargill.com/locations-protein-processing.
- 340. Meat Processing," Cargill, accessed June 4, 2023, https://www.cargill.ca/en/meat-processing; "Cargill Schuyler meatpacking plant, Nebraska," The Center for Land Use Interpretation, accessed June 4, 2023, https://clui.org/ludb/site/cargill-schuyler-meatpacking-plant; Michael Holtz, "6 months inside one of America's most dangerous industries," The Atlantic, accessed June 4, 2023, https://www.theatlantic.com/magazine/archive/2021/07/meatpacking-plant-dodge-city/619011/.
- Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 158.
- 342. "Agriculture," Cargill, June 4, 2023, https://www.cargill.nl/en/agriculture.
- 343. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 8.
- 344. John Reidy, "Cargill is Argentina's leading grain exporter," World Grain, January 26, 2022, https://www.world-grain.com/articles/16397-cargill-is-argentinas-leading-grain-exporter.
- 345. "The future is now," Cargill, accessed June 4, 2023, https://www.cargill.com/industrial/metals.
- 346. "Our Fleet Dry Bulk Carriers," Cargill, accessed June 4, 2023, https://www.cargill.com/transportation/dry-bulk-shipping/fleet.
- Cargill, 2019 Annual report, Minneapolis: Cargill, 2019, 5, https://www.cargill.com/doc/1432144962450/2019-annual-report.pdf
- Cargill, 2021 Annual report, Minneapolis: Cargill, 2021, 3, https:// www.cargill.com/doc/1432194192294/2021-cargill-annual-report. pdf
- 349. https://www.businessinsider.nl/richest-billionaire-families-america-2018-7?international=true&r=US
- Javier Blas, and Jack Farchy, The World for Sale: Money, Power and the Traders Who Barter the Earth's Resources (Manhattan: Random House, 2021), 249.
- 351. Also referred to as "COFCO Group" of "COFCO Corporation".
- 352. "About COFCO," COFCO, accessed June 4, 2023, http://www.cofco.com/en/AboutCOFCO/; "Contact Us," COFCO, accessed June 4, 2023, http://www.cofco.com/en/News/Media/ContactUs/.
- 353. Neil Hume and Emiko Terazono, "Cofco arm pledges to challenge international traders," Financial Times, accessed June 4, 2023, https://www.ft.com/content/509f2de6-2c54-11e8-9b4b-bc4b9f08f381; The group furthermore reported (for 2021) to have total assets of RMB 686.0 billion (US\$ 99.7 billion). "About COFCO," COFCO, accessed June 4, 2023, http://www.cofco.com/en/AboutCOFCO/
- 354. Marching Onto the Global Scene," COFCO, accessed May 29, 2023, 1, http://www.cofco.com/uploads/soft /170726/9-1FH6152506.pdf.
- 355. Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 168.
- 356. Matthew Gaudreau, "Seeds, Grain Trade, and Power Off-land: Chinese Agribusiness in Global Agrarian Change," BICAS, MOSAIC Research Group, RCSD Chiang Mai University, Transnational Institute, accessed June 4, 2023, 8-9, https://www.eur.nl/sites/ corporate/files/CMCP\_4-\_Gaudreau.pdf.
- 357. Zhong Nan, "Chinese food trader COFCO aims to rival global giants," China Daily, June 15, 2016, https://www.chinadaily.com. cn/business/2016-06/15/content\_25714978.htm; Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 30.
- 358. "A Chinese state-backed giant's rapid rise in global trading of food," *The Economist*, February 2, 2019, https://www.economist.com/business/2019/02/02/a-chinese-state-backed-giants-rapid-rise-in-global-trading-of-food.

- 359. Hongzhou Zhang, Securing the 'Rice Bowl': China and Global Food Security (London: Palgrave Macmillan, 2018), 253; "About COFCO," COFCO, accessed June 4, 2023, http://www.cofco.com/en/AboutCOFCO/; Dominique Patton, "China's COFCO 2016 profit jumped 79 pct after business overhaul," Reuters, January 20, 2017, https://www.reuters.com/article/china-cof-co-idUSL4NIFA26V; COFCO International (@COFCOINTL). 2022. "#COFCO Corporation, our majority shareholder, announced record performance for 2021. Operating income exceeded USD 103.8 billion, up USD 83 billion in 2020. Total profits exceeded USD 3.6 billion, up USD 377 million compared to 2020." Twitter, January 17, 2022, 10:04 a.m., https://twitter.com/COFCOINTL/status/1483017357454983169.
- 360. "Who we are," COFCO International, accessed June 4, 2023, https://www.cofcointernational.com/who-we-are/; "About COFCO," COFCO, accessed June 4, 2023, http://www.cofco.com/en/AboutCOFCO/.
- COFCO, 2020 COFCO CSR Report, Beijing: COFCO, 2020, 5, http://www.sasac.gov.cn/n4470048/n13461446/n14398052/n19603748/c26127839/part/26127850.pdf.
  - Li Xiaoyang, "Feeding Your Needs," Beijing Review, September 23, 2019, http://www.bjreview.com/Business/201909/ t20190923\_800179091.html; "COFCO's total profit made a record high in 2017," Chinatea, May 30, 2018, http://www.chinatea.com. cn/en/business/225.html; Based on the 2017 average RMB/Dollar exchange rate (1 dollar = 6.76 Yuan); Li Xiaoyang, "Feeding Your Needs," Beijing Review, September 23, 2019, http://www.bjreview.com/Business/201909/t20190923\_800179091.html; "COFCO Listed on the Fortune Global 500 list for the 26th Consecutive Year," COFCO, April 12, 2020, http://www.cofco.com/en/News/ Allnews/2020/1204/49828.html; based on the 2019 average RMB/Dollar exchange rate (1 dollar = 6.91 Yuan); COFCO International (@COFCOINTL). 2022. "#COFCO Corporation, our majority shareholder, announced record performance for 2021. Operating income exceeded USD 103.8 billion, up from USD 83 billion in 2020. Total profits exceeded USD 3.6 billion, up USD 377 million compared to 2020." Twitter, January 17, 2022, 10:04 a.m., https:// twitter.com/COFCOINTL/status/1483017357454983169; COFCO International (@COFCOINTL). 2022. "#COFCO Corporation, our majority shareholder, announced record performance for 2021. Operating income exceeded USD 103.8 billion, up from USD 83 billion in 2020. Total profits exceeded USD 3.6 billion, up USD 377 million compared to 2020." Twitter, January 17, 2022, 10:04 a.m., https://twitter.com/COFCOINTL/status/1483017357454983169; Thomson Reuters Eikon, [COFCO CORP - Financial summary - Revenue from Business Activities - Total], Data set, 2022, https://eikon.thomsonreuters.com/index.html; http://www cofco.com/en/AboutCOFCO/; following 2022 average exchange rate RMB/USD of 6,7328. https://www.exchange-rates.org/exchange-rate-history/usd-cny-2022.
- 363. "About COFCO," COFCO, accessed June 4, 2023, http://www.cofco.com/en/AboutCOFCO/.
- 364. "COFCO Meat," COFCO, accessed June 4, 2023, http://www.cofco.com/en/BrandProduct/COFCOMeat/.
- COFCO, 2020 COFCO CSR Report, Beijing: COFCO, 2020, 6, http://www.sasac.gov.cn/n4470048/n13461446/n14398052/n19603748/c26127839/part/26127850.pdf.
- "GRANDJOY," COFCO, accessed June 4, 2023, http://www.cofco. com/en/BrandProduct/COFCOLand/.
- COFCO, 2020 COFCO CSR Report, Beijing: COFCO, 2020, 35, http://www.sasac.gov.cn/n4470048/n13461446/n14398052/n19603748/c26127839/part/26127850.pdf.
- 368. "COFCO Capital," COFCO, accessed June 4, 2023, http://www.cofco.com/en/BrandProduct/COFCOCapital/.
- 369. "COFCO Coca Cola," COFCO, accessed June 4, 2023, http://www.cofco.com/en/BrandProduct/COFCOCocaCola/.
- 370. "About COFCO," COFCO, accessed June 4, 2023, http://www.cofco.com/en/AboutCOFCO/.
- 371. Ibid
- 372. "Marching Onto the Global Scene," COFCO, accessed May 29, 2023, 4, http://www.cofco.com/uploads/soft /170726/9-1FH6152506.pdf.
- 373. Elisa Nessi, "China grains giant COFCO expands its presence in Switzerland," Switzerland Global Enterprise, January 30, 2018, https://www.s-ge.com/en/article/news/china-grains-giant-cofco-expands-its-presence-switzerland.

- 374. "COFCO hires banks for trading arm IPO plan: Bloomberg," Reuters, March 15, 2021, https://www.reuters.com/article/us-cof-co-ipo-idUKKBN2B72L2; Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 170.
- 375. "Building a world-class global agri-business committed to providing the food the world needs in a responsible way," COFCO International, accessed June 4, 2023, https://www.cofcointernational.com/media/1919/cof\_fact-sheet\_en\_2021-06.pdf.
- 376. "COFCO around the world: Brazil Cementing our position in the agricultural powerhouse," COFCO International, August 26, 2021, https://www.cofcointernational.com/stories/ cofco-around-the-world-brazil-cementing-our-position-in-the-agricultural-powerhouse/.
- COFCO International, Sustainability Report 2022, Geneva: COFCO International, 2022, 4, https://www.cofcointernational.com/media/p5dalavs/cofco-sr22-23-06-26.pdf.
- COFCO International, Sustainability Report 2022, Geneva: COFCO International, 2022, 5, https://www.cofcointernational.com/media/p5dalavs/cofco-sr22-23-06-26.pdf.
- 379. Federico Di Yenno, Patricia Bergero, Julio Calzada, "Cargill leads the ranking of Argentinian exporters in 2021," *Bolsa de Comercio de Rosario*, accessed June 4, 2023, https://www.bcr.com.ar/es/mercados/mercado-de-granos/news/cargill-leads-rank-ing-argentinian-exporters-2021.
- ADM ranked sixth. "Dreyfus, COFCO head-to-head in Brazil soybean export rankings -data," Reuters, January 15, 2019, https:// www.reuters.com/article/brazil-grains-idINLINIZEI62.
- 381. Jennifer Clapp, "ABCD and beyond: From grain merchants to agricultural value chain managers," *Canadian Food Studies* 2, no. 2, (2015), 126–135, https://doi.org/10.15353/cfs-rcea.v2i2.84.
- 382. https://www.ldc.com/wp-content/uploads/Update-on-H1-2023-Financials.pdf; https://louisdreyfus.com/
- "Our Heritage and Story at LDC," Louis Dreyfus Company, accessed June 6, 2023, https://www.ldc.com/who-we-are/about-us/heritage/.
- 384. Jonathan C. Kingsman, *Out of the Shadows: The New Merchants of Grain* (Independently Published, 2019), 180.
- Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 83, https://www.ldc.com/annual-re-port-2022/.
- 386. 386 "Financial Information: Key Figures," Louis Dreyfus Company, accessed June 4, 2023, https://www.ldc.com/who-we-are/financial-information/key-figures/.
- Jonathan C. Kingsman, Out of the Shadows: The New Merchants of Grain (Independently Published, 2019), 179.
- 388. LDC (2018) "Louis Dreyfus Company B.V. Reports Half-Year Consolidated Financial Results," Louis Dreyfus Company, October 8, 2018, https://www.ldc.com/press-releases/louis-dreyfus-company-b-v-reports-half-year-consolidated-financial-results/; Government of the United States of America, U.S. Department of Agriculture, Economic Research Service, Oil Crops Sector at a Glance, accessed 4 June 2023, https://www.ers.usda.gov/topics/crops/soybeans-and-oil-crops/oil-crops-sector-at-a-glance/.
- Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2023, 13, https://www.ldc.com/annual-report-2022/.
- Louis Dreyfus Company, 2020 Annual Report, Rotterdam: Louis Dreyfus Company, 2021, 63, https://www.ldc.com/annual-report-2020/.
- Louis Dreyfus Company, 2019 Annual Report, Rotterdam: Louis Dreyfus Company, 2020, 14, https://www.ldc.com/reports-publications/annual-report-2019/.
- 392. Louis Dreyfus Company, 2021 Annual Report, Rotterdam: Louis Dreyfus Company, 2021, 29, https://www.ldc.com/annual-re-port-2021/; Louis Dreyfus Company, 2021 Annual Report, Rotterdam: Louis Dreyfus Company, 2021, 22, https://www.ldc.com/annual-report-2021/; Louis Dreyfus Company, 2019 Annual Report, Rotterdam: Louis Dreyfus Company, 2019, 70, https://www.ldc.com/news-and-insights/reports-and-publications/; Louis Dreyfus Company, 2017 Annual Report, Rotterdam: Louis Dreyfus Company, 2017, 66, https://www.ldc.com/news-and-insights/reports-and-publications/.

- 393. "Our Heritage,", Louis Dreyfus Company, accessed June 4, 2023, https://www.ldc.com/who-we-are/about-us/heritage/.
- Since 2023. Arvin Donley, "LDC creates new food, feed solutions platform," World Grain, December 12, 2022, https://www.worldgrain.com/articles/17847-ldc-creates-new-food-feed-solutions-platform.
- Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 4-5, https://www.ldc.com/annual-re-port-2022/.
- Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 16, https://www.ldc.com/annual-report-2022/.
- Louis Dreyfus Company, 2022 Annual Report, Rotterdam: Louis Dreyfus Company, 2022, 5, https://www.ldc.com/annual-report-2022/
- 398. "FY 2022 Financial Highlights," *Louis Dreyfus Company*, accessed June 4, 2023, 7, https://www.ldc.com/wp-content/uploads/Update-on-FY22-Financials.pdf.
- 399 Ibid
- Neil Hume and Emiko Terazono, "Louis Dreyfus sells stake to Abu Dhabi sovereign wealth fund," Financial Times, November 11, 2020, https://www.ft.com/content/d3b1b571-d927-4315-9fld-20162828884

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January 2024

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Rodrigo Fernandez, Margarida Silva and Myriam Vander Stichele.

This publication is supported by a grant from the Dutch Ministry of Foreign Affairs. The content of this publication is the sole responsibility of SOMO and can in no way be taken to reflect the views of the Dutch Ministry of Foreign Affairs.



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