

JJF Holding Land-Grabbing Case Intensifies Soy Traders' Exposure to Cerrado Deforestation

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This report analyses deforestation risks linked to the "JJF Holding de Investimentos e Participações" land-grabbing case in Formosa do Rio Preto in the Matopiba region of the Cerrado biome (Brazil). The JJF Holding case, one of the largest land grabbing incidents in Brazil, is linked to land tenure insecurities that cover 366,000 hectares in one of the key Cerrado soyproducing areas. The land tenure insecurities expose soft-commodity traders to deforestation and financial risks.

Key Findings:

- Formosa do Rio Preto was the third largest soy-producing municipality in Brazil in 2018. Between 2006 and 2017, soy production in the municipality increased by 488 percent. Bunge and ALZ Grãos are the main exporters of soy sourced in Formosa do Rio Preto, with Bunge exporting 28 percent and ALZ Grãos 25 percent.
- Land tenure insecurities drive deforestation in the Cerrado biome. In 2015, the ownership of a 366,000-hectare area was given to José Valter Dias, one of the owners of JJF Holding. In the same year, 10,530 hectares of native vegetation were cleared, almost six times the area cleared in 2014.
- Bunge, ALZ Grãos, and Cargill face elevated deforestation risks due to their sourcing from areas with land tenure insecurities. They all have warehouses inside the area linked to the JJF Holding land-grabbing case. Traders with sustainability policies may consider blocking suppliers in areas where land-grabbing cases have taken place.
- Soy traders could reduce financial risk by cutting ties with JJF. Bunge's and Cargill's link to JJF is one of numerous deforestation risks for the traders in Brazil. The accumulation of deforestation-related events could create revenue-at-risk, financing risk and reputation risk. For Bunge alone, these risks are valued at more than USD 5 billion. Blocking supplies from JJF Holding would affect less than one percent of soy traders' assets.

Formosa do Rio Preto is a key soy hub in Cerrado

Formosa do Rio Preto is one of the most important soy-producing municipalities in the Matopiba region of the Cerrado biome in Brazil. It ranks second among all Brazilian municipalities in soy planted area (411,224 ha in 2018) and fourth in volumes of soy produced (1.3 million tons in 2017). From 2006 to 2018, the soy planted area increased significantly. The increase of 312,064 ha of the soy planted area in Formosa do Rio Preto between 2006 and 2018 represented growth of 315 percent. The soy production volume increased by 1.1 million tons between 2006 and 2017 in Formosa do Rio Preto, growth of 488 percent. This high growth signals that this area will remain among the top soy-producing municipalities in Brazil.

Formosa do Rio Preto ranked third in soy trading (<u>1.2 million tons</u>) among Brazilian municipalities in 2017. Thirty-six percent of the soy produced in Formosa do Rio Preto in 2017 remained in the domestic market. The remaining 64 percent was exported, with destinations including China (30 percent), Germany (15 percent), France (7 percent), and Netherlands (3 percent), among others.

Four companies dominate the export from Formosa do Rio Preto: Bunge (28 percent), ALZ Grãos (25 percent), Cargill (6 percent), and Horita (5 percent). Bunge was the largest soy exporter in Brazil in 2017 with 11.9 million tons. Cargill was the second largest with 10.8 million tons. ALZ Grãos, a joint venture between Amaggi, Louis Dreyfus Commodities and Zen-Noh (formerly Amaggi & LD Commodities), was ranked 15th in soy export in Brazil in 2017. Figure 1 shows that from 2008 to 2011, Bunge was the only exporter of soy produced in Formosa do Rio Preto. ALZ Grãos started to export soy from the municipality in 2012. Brazilian company Horita Empreendimentos started exporting in 2015. In 2016, Cargill started exporting soy sourced from the municipality, but at a lower volume compared to Bunge and ALZ Grãos.

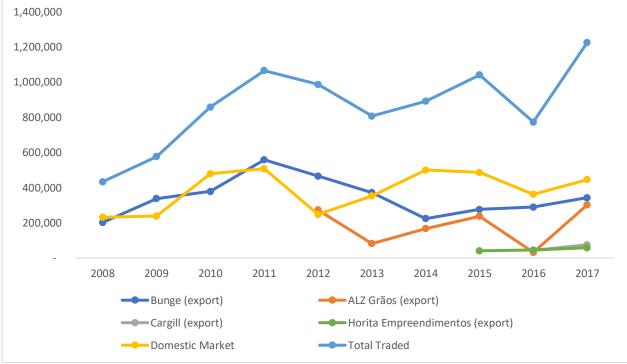


Figure 1. Trading of soy produced in Formosa do Rio Preto, Bahia from 2008 to 2017, in tons

Sources: Elaborated by CRR based on <u>Trase</u> data

In June 2019, the six members of the Soft-Commodities Forum (SCF) – ADM, Bunge, Cargill, COFCO International, Glencore Agriculture and Louis Dreyfus Company (LDC) – issued a common and public report on soy sourced from Brazil's Cerrado biome. The SCF members reported the percentage of soy sourced in the Cerrado biome relative to their total volume sourced in Brazil in 2018. Even though these reports do not specify the companies' soy sourcing per municipality, they do provide the percentage of companies' direct and indirect suppliers in 25 priority municipalities. The list of 25 priority municipalities considered the most vulnerable areas to native vegetation conversion linked to soy cultivation in Cerrado biome. Companies are expected to "engage, monitor and report" on their direct and indirect sourcing from these municipalities. Formosa do Rio Preto and two bordering municipalities, Riachão das Neves (Bahia) and Mateiros (Tocantins), are part of the 25 priority municipalities list of the SCF members.

Bunge, ALZ Grãos and Cargill have warehouses operating inside the JJF Holdings' area

Within a radius of 80 km from the center of the area under dispute, there are <u>46 warehouses with an</u> <u>installed capacity of 4 million tons</u>. Soy produced in the area allegedly owned by JJF Holding is highly likely to supply Bunge, ALZ Grãos (former Amaggi & LD Commodities), and Cargill directly, as these companies own warehouses inside the area (see Figure 2). Bunge, Amaggi, and ALZ Grãos' joint venture partner Louis Dreyfus have all prioritized Formosa do Rio Preto as part of their SCF commitments.

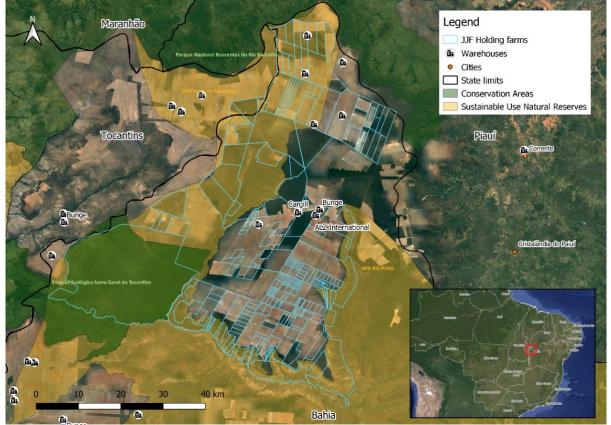


Figure 2. Location of properties claimed by JJF Holding in Formosa do Rio Preto and traders' presence in the area

Source: Elaborated by CRR based on SIGEF, SICARM, MMA, and IBGE.

The ownership of large tracts of land in northern Formosa do Rio Preto has been in flux for decades. The Cerrado Development Program (Prodecer) is a governmental project in partnership with the Japanese Cooperation Agency (JICA) that lasted from the 1970s until the late 1990s. During that time period, Prodecer supported the <u>expansion of agriculture on approximately 350,000 hectares of Cerrado biome</u>. In the 1980s, in the second phase of the program, Prodecer II supported 300 families of immigrants from the southern state of Paraná occupying the northern part of Formosa do Rio Preto. Prodecer II received <u>USD 350 million</u> for investments from the Japanese government. That resulted in a producers' debt <u>estimated at BRL 400 million</u> (USD 100 million) due to problems linked to interest rates and economic instability. Prodecer is also linked to <u>several environmental impacts</u> in Cerrado, such as large-scale land conversion, native vegetation clearing, biodiversity loss, and water source scarcity.

Two of the largest Brazilian land-grabbing cases are located within Formosa do Rio Preto, Bahia. They have taken place in the area of the <u>Condomínio Agrícola Estrondo</u> and the area allegedly owned by <u>JJF</u><u>Holding</u>. The Condomínio Agrícola Estrondo, in the southern portion of the municipality, is a land-grabbing case linked to <u>human rights crimes</u> and environmental impacts that affect the livelihood of local communities. The case involving JJF Holding is known as one of the <u>largest land-grabbing</u> cases in Brazil. José Valter Dias, one of the owners of JJF Holding, has been the focus of several Court cases. He either claims the area's ownership or is under prosecution for land-grabbing crimes in Formosa do Rio Preto.

JJF Holding was established in June 2016, when it declared assets of <u>BRL 702 million</u> (USD 175 million) linked to land ownership in Formosa do Rio Preto. José Valter Dias, his son Joilson Gonçalves Dias, and Geciane Souza Maturino dos Santos are the current owners of JJF Holding. Even though JJF Holding was established only in 2016, the land-grabbing case linked to its owners received Court attention as early as 2007.

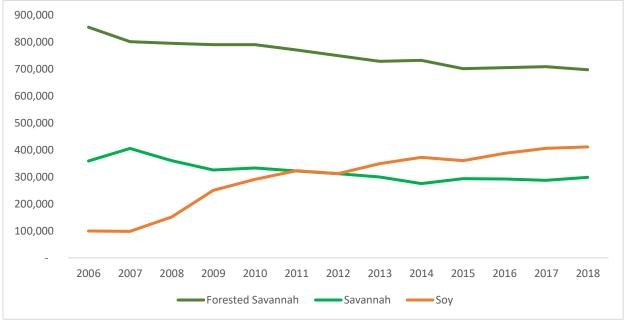
- In 2007, Bahia state's Court decision <u>CGJ-909/2007</u> gave ownership of 43,000 hectares of the Fazenda São José to José Valter Dias.
- In 2008, Bahia state's Court decision CGJ-226/2008 returned possession of 43,000 hectares of Fazenda São José back to the previous occupants, beneficiaries of Prodecer II.
- In July 2015, Bahia state's Court decision <u>CCI-105/2015- GSEC</u> named José Valter Dias as the single owner of an area now covering 366,000 hectares in the region. The area became one of the largest single land ownerships in the agricultural frontier of Matopiba in the Cerrado biome.
- In November 2015, the Court decision CCI-105/2015- GSEC was partially suspended, giving the previous occupants the right to stay in the area.
- In June 2016, JJF Holding de Investimentos e Participações (JJF Holding) was formed.
- In April 2017, a local judge <u>ordered</u> the removal of all the occupants of the area, returning its ownership to José Valter Dias.
- In December 2018, at a <u>public hearing</u> in the Chamber of Deputies in Brasília, producers declared that since 2017 some of them were <u>forced to pay extortionate</u> taxes (4.8 tons of soybean per ha) for producing in the area.
- In December 2018, a <u>local Court decision reaffirmed the ownership</u> of the area for José Valter Dias and JJF Holding.
- In March 2019, the <u>National Justice Council (CNJ) suspended</u> the Bahia state's Court decision CCI-105/2015-GSEC from 2015, returning the <u>land possession</u> to the previous occupants.

In addition to the contradictory decisions regarding the ownership of the area, José Valter Dias also <u>perpetrated a Court case</u> against the Federal Government in 2017. In this Court case, he requested the removal of an area of 55,417 hectares of the "Estação Ecológica Serra Geral do Tocantins" from protection under the responsibility of the Brazilian Chico Mendes Institute for Biodiversity Conservation (ICMBio). The Federal Natural Conservation Area category has strict rules that do not allow occupation or production within its limits. This area overlaps with the parcel 23 of Fazenda São José, of which José Valter Dias claims to be the single owner (see Figure 2). The Court has not yet made a final decision on this case.

Land tenure insecurities drive deforestation in Cerrado biome

The increase of soy planted area and production is directly linked to the increase of native vegetation conversion in Formosa do Rio Preto. Figure 3 below shows the area of native vegetation (Forest Savannah and Savannah) compared to the soy planted area from 2006 to 2018.





Sources: Elaborated by CRR based on <u>IBGE</u> and <u>Mapbiomas</u> data

Based on CRR's analysis, it is possible to link land clearing with legal developments of the JJF Holding land-grabbing case. One of the turning points in the timeline of the JJF Holding case in Formosa do Rio Preto happened in 2015, when <u>CCI-105/2015-GSEC</u> transferred the ownership of 366,000 hectares of the area to José Valter Dias. In that year, the National Institute of Space Research (Inpe) <u>registered 10,530</u> <u>hectares of cleared land in the area</u>, more than six times the area cleared in the previous year (see Figure 4).

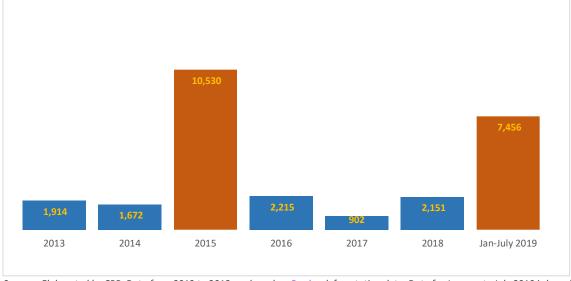


Figure 4: Deforestation in the area linked to the JJF Holding land-grabbing case, in hectares

Sources: Elaborated by CRR. Data from 2013 to 2018 are based on <u>Prodes</u> deforestation data. Data for January to July 2019 is based on <u>Deter</u> deforestation alerts and was visually confirmed.

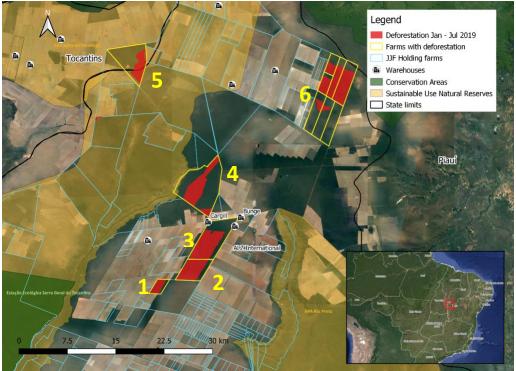
In the first seven months of 2019, after José Valter Dias regained ownership of the area, 7,456 hectares of land clearance could be visually confirmed from the Inpe's deforestation alerts. The cleared area in the first seven months of 2019 is already more than half of the total seen in 2015 and falls in six different farms linked to JJF Holding. All six of these farms are allegedly owned either by José Valter Dias or by JJF Holding (See Figures 5 and 6), based on CRR's analysis of environmental licenses valid during the first half of 2019.

Figure 5. Cleared areas between January and July 2019 linked to JJF Holding land-grabbing case in Formosa do Rio Preto, Bahia

	Name Property	Alleged owner	Total	Cleared area	% Cleared	Licenses approved by the
	Name Property	Allegeu Owliei	area	(Jan-July19)	area	Bahia's environmental agency
1	Fazenda Califórnia	JJF Holding	425 ha	341 ha	80%	340 hectares (Nov18 to Nov20) requested by Dirceu di Domenico
2	Fazenda São José (Parcela 06)	José Valter Dias	1,300 ha	1,033 ha	79%	Not found
3	Fazenda São José (Parcela 07)	José Valter Dias	2,552 ha	1,378 ha	54%	2,023 hectares (April19 to April21) requested by JJF Holding
4	Fazenda São José (Parcela 10)	José Valter Dias	3,887 ha	1,644 ha	42%	3,071 hectares (Aug18 to Aug20) requested by João Antônio Franciosi
5	Fazenda São José (Parcela 14)	José Valter Dias	2,156 ha	611 ha	28%	Not found
6	Fazenda São José (Parcela 24)	JJF Holding	5,865 ha	2,449 ha	42%	Not found

Sources: Elaborated by CRR. The ownership and size of the farms were checked in the <u>Sigef</u> system. The land clearance was visually confirmed and based on deforestation alerts from <u>Deter</u>. The Environmental Licenses were checked in the Bahia State System of Environmental Information and Water Resources (<u>Seia</u>)

Figure 6. Location of cleared areas between January and July 2019 linked to JJF Holding landgrabbing case in Formosa do Rio Preto, Bahia



Source: Elaborated by CRR based on data from <u>Sigef</u>, <u>ICMBio</u> and <u>Deter</u> systems

Fifty-five percent of the native vegetation clearing in farms linked to JJF land-grabbing between January and July 2019 was not authorized. The actors who cleared 4,093 hectares of native vegetation on these farms did not have an environmental license registered in the Bahia state environmental agency. For the other 3,363 ha, different producers requested environmental licenses. One of these licenses was requested by JJF Holding and the others by Dirceu Di Domenico and João Antônio Franciosi (see Figure 5). Dirceu Di Domenico, who requested and received an environmental license for clearing 340 hectares in Fazenda Califórnia, has several links to the JJF Holding land-grabbing case. In September 2017, a lawsuit filed by Adilson Heidi Sujuki mentioned Dirceu Di Domenico as a <u>"leaseholder" of José Valter Dias</u> farms. The Di Domenico family is also mentioned in the main <u>lawsuit against José Valter Dias</u>, filed by Domingos Bispo. In this lawsuit, Dirceu Di Domenico claims that he is the rightful owner of three farms which were subject of a judicial dispute. Fazenda Califórnia is one of these farms. João Antônio Franciosi requested an environmental license for clearing 3,071 ha on Fazenda São José – Parcela 10 between August 2018 and August 2020. In the first half of 2019, 1,644 ha on Fazenda São José – Parcela 10 were cleared. João Antônio Franciosi and his brothers are <u>the second largest soy producers</u> in the Bahia portion of Matopiba, accounting for 90,000 ha in property.

Traders face elevated deforestation risks sourcing from areas with land tenure insecurities

Bunge, ALZ Grãos, and Cargill own warehouses inside the area linked to the JJF Holding land-grabbing case, exposing them to very high deforestation risks. Bunge, ALZ Grãos, and Cargill are likely sourcing soy produced that is tied to the combination of land tenure insecurity and deforestation surrounding the JJF

Holding case. Traders have two possible scenarios for decreasing their exposure to deforestation risks in this area. For one, traders could monitor and block soy sourced from farms with proved links to deforestation driven by land tenure insecurities. Secondly, traders could remove facilities and stop sourcing from all the farms inside land-grabbing cases areas considering the deforestation risk.

Bunge was linked to <u>44 percent of the export</u> of soy sourced in Formosa do Rio Preto in 2017. Even though Formosa do Rio Preto is the third largest supply municipality for Bunge, it represents 3 percent of Bunge's total exported soy from Brazil in 2017. Bunge is the leading soy exporter from Brazil. Its large soy market exposure and more complex monitoring increase the risk that it may violate its zero-deforestation commitment. At the same time, having suppliers spread throughout <u>276 municipalities</u> gives Bunge more flexibility in avoiding operations in high-risk deforestation municipalities, such as Formosa do Rio Preto. Bunge <u>updated its sustainability policy</u> in December 2018, but it falls short of expectations that the company would exclude legal deforestation from its supply chain. At the same time, it provides more details about Bunge's measures to deal with non-compliance in case of illegal deforestation.

In 2017, ALZ Grãos was linked to 38 percent of the soy exported from Formosa do Rio Preto. ALZ Grãos has a high risk of sourcing soy linked to deforestation in the JJF land-grabbing case area, as 25 percent of its Brazilian soy export originates from Formosa do Rio Preto. ALZ Grãos' suppliers are spread throughout 44 Brazilian municipalities, a relatively low number that makes it harder to transfer soy volumes sourced in Formosa do Rio Preto to other municipalities. Forty-nine percent of ALZ Grãos' soy exports come from three municipalities that are in the <u>SCF 25 priority municipalities list</u>: Formosa do Rio Preto and Correntina, in Bahia, and Ribeiro Gonçalves in Piauí. The scope of Louis Dreyfus' Sustainability Policy, adopted in July 2018, is understood to also <u>cover its ALZ Grãos joint venture</u> with Amaggi and Zen-Noh. Louis Dreyfus' <u>Soy Sustainability Policy</u> includes a commitment to eliminate all native vegetation conversion of its soy supply chain. It also specifically highlights the Cerrado biome as its focus area.

In 2017, Cargill was linked to 10 percent of the soy exported from Formosa do Rio Preto, which accounted for one percent of its Brazilian soy export volumes. Cargill's suppliers in Brazil are spread throughout 277 municipalities. Since Cargill's suppliers are scattered throughout a large number of municipalities, its monitoring for non-compliance is challenging. However, this situation also gives the company more flexibility to avoid sourcing from areas that are at high risk of deforestation, such as Formosa do Rio Preto. Cargill updated its forest policy and published a <u>new soy policy in February 2019</u>. The company's soy policy includes the provision of financial incentives to help curb deforestation and to apply non-compliance mechanisms within its soy supply chain.

Financial risk analysis: Bunge, ALZ Grãos and Cargill and financers face risks

JJF Holding's land-grabbing case and links to deforestation create a financial risk, particularly for investors in Bunge and financers of ALZ Grãos and Cargill. Cutting business ties with JJF Holding would protect the most value for these soy traders. Bunge is the largest soy trader active in Formosa do Rio Preto, and ALZ Grãos is the most exposed. For Bunge and privately-owned Cargill, the link to JJF Holding's ESG violations is one of a number of instances in which these leading soy traders are connected to deforestation in Brazil. This accumulation of events could create revenue-at-risk and financing risk, while also adding to reputation risk. The current analysis shows that cutting ties with JJF Holding would lead to a relatively low-value loss from stranded assets.

JJF Holding is a privately-owned company which lacks transparency. Addressing deforestation through soy traders, active in JJF Holding's land-grabbing case area, is more effective. There is no transparency on JJF Holding's financials and financial relations; the company is likely financed by local banks. There is also no information about material clients.

Bunge, a publicly-listed company, has the largest export position in soy (44 percent) in Formosa do Rio Preto, Bahia. The other soy export companies most linked to the region are ALZ Grãos and Cargill with respectively 39 percent and 10 percent of exports from the municipality. The 33/33/33 percent joint venture partners in ALZ Grãos (Louis Dreyfus, Amaggi and Zen-Noh) are not publicly listed. Both Louis Dreyfus and Amaggi are family-owned, while Zen-Noh is a large Japanese agricultural cooperative. Cargill is a private company. Because their warehouses are near recently cleared areas inside the JJF Holding's land-grabbing case area, soy traders face the following financial risks:

- Stranded asset risk.
- Market access risk.
- Financing risk and higher cost of capital.
- Reputation risk.

Stranded asset risk for the soy traders in this municipality could be realized. As the size of their assets in Formosa do Rio Preto is small relative to their overall size, cutting ties with suppliers within the JJF Holding area would be a low-cost solution. In a 2017 study on Bunge, CRR calculated that for the whole Piauí state the full write-down of all Bunge assets could impact the global net assets by 1.5 percent (or a maximum of USD 172 million), and Brazilian assets by 7 percent. Its storage activities were estimated at 0.7 million metric tons. In the case of Formosa do Rio Preto, Bunge can be linked to 0.4 billion tons of soy, which accounts for 4 percent of its Brazilian exports. On a global scale, circa 1 percent of its fixed assets is at risk. For Cargill, the exposure is much smaller than for Bunge. ALZ Grãos is, by comparison, most exposed to soy exports from Formosa do Rio Preto, Bahia. This municipality represents 25 percent of its Brazilian exports are linked to SCF municipalities. However, the impact on its three separate joint venture partners will be relatively small. Nevertheless, the private owners/investors could face write-downs in their assets, reducing expansion opportunities.

Market access risk for traders could be substantial. For Bunge, this risk is valued at USD 4 billion and mainly related to their exports to and sales in Europe, where the majority of members of the Consumer Goods Forum and signatories of the Cerrado Manifesto are based. Since 2017, the number of global brands <u>signatories</u> has risen from 32 to 70, with most companies from Western Europe. Soy traders have a fragmented customer base with relations with a large number of clients, many of which are business-to-business. There is not one customer with a material relationship. Each customer (feed manufacturer, food company) is responsible for a low single percentage of a soy traders' revenue. In particular, their Western European client base could require an increase in transparency and monitoring of soy traders' supply chains in Brazil. One example is Nestlé, which re-affirmed recently its commitment to be <u>deforestation-free in 2022</u>.

As the five largest soy traders in the world control more than half of Brazil's soy exports, customers have difficulties avoiding purchasing from the group as a whole. However, individual traders could face substantial revenue-at-risk as they lag competitors in deforestation policies, transparency, and

implementation. If the 70 Cerrado Manifesto signatories from Western Europe shift their soy and soyderivative purchases from Bunge to another soy trader/processor, this change could impact Bunge's revenues by 18 percent. This estimate is based on the assumption that each customer generates 0.25 percent of Bunge's revenues, translating into USD 8.2 billion revenue at risk, or USD 0.4 billion gross profit (the average gross margin over the last five years was 5 percent). If these revenues do not "leak" to new, less-demanding customers, the value of the USD 0.4 billion annual gross profit decline would be USD 4 billion in a discounted cash flow calculation. That is equal to 26 percent of Bunge's current Enterprise Value (market cap plus net debt: USD 15.7 billion) and 51 percent of its market capitalization (USD 7.8 billion). Bunge could substitute some of the 70 companies with other companies in the fragmented animal feed/food market, thereby possibly reducing the overall potential effect.

ALZ Grãos's has high exposure to the Formosa do Rio Preto region. However, Western European customers are a relatively small part (eight percent). The three joint venture partners would face a limited net profit and dividend reduction from the JV and would subsequently have less financial room to expand into new activities.

Financing risk could amount to hundreds of U.S. dollars in DCF terms: Companies could face rising cost of capital, while shareholders, bondholders, and banks may increase engagement. The top-10 shareholders of Bunge mainly consist of U.S. investors with <u>lagging deforestation policies</u>. For both Bunge's and Cargill's gross debt, issued bonds are the largest component, and a minority is from bank loans. The bonds are mainly held by U.S. investors with relatively weak deforestation policies. There are some minor positions in Bunge among European investors with stronger deforestation policies, including AXA, Allianz, and Credit Agricole.

In July 2019, <u>a CRR report concluded that Cargill</u> could face higher cost of capital as its lenders may tighten their deforestation policies. Cargill lenders with policies include BNP Paribas, Barclays, Deutsche Bank, RBS, Santander, Standard Chartered, JPMorgan, Rabobank, Société Générale, Citigroup, ING Group, Mitsubishi UFJ Financial, and HSBC. The CRR report concluded that an increase in Cargill's cost of capital would reduce the enterprise value by USD 530 million.

At ALZ Grãos, the joint venture holding and the three joint venture partners have separate financing models. These structures mean that a wide group of banks is involved from many regions, including Japan, Latin America, the United States, and Europe. Louis Dreyfus has moved forward with green financing: In May 2019, it <u>renewed a USD 750 million</u> loan that was priced in relation to how the company performs compared to a number of sustainability goals, but the company did not include deforestation. The loan was anchored by BNP Paribas, Bank of America, ICBC, ING, MUFG, Société Générale, and SunTrust.

Reputation risk is mounting for Bunge and Cargill, as the list of connections to deforestation is getting longer for these companies. Bunge could lose USD 1.2 billion equity value if investors give more weight to its shortcomings in deforestation. In December 2017, CRR emphasized Bunge's risks related to deforestation in Piauí. With its 45 percent market share in soy trading in Piauí, where deforestation was already at a high level, Bunge and its financers faced financial risks. Bunge also belonged to a group of five companies (including Cargill) that in 2018 were fined for USD 6.7 million (in total) for deforestation-related activities and land clearing in the Matopiba region in Brazil's Cerrado. The fines arose because the five traders allegedly purchased 3,000 metric tons of soy and other products from areas illegally deforested and protected under Brazilian law.

For Cargill, its current situation regarding deforestation risk exposure in the Cerrado has been highlighted by CRR and CSOs. In April 2018, CRR emphasized Cargill's risks from having 21 percent market share in Maranhão, where deforestation was high. Cargill has been mentioned in <u>various publications</u> related to deforestation. In July 2019, CRR <u>published about Cargill's deforestation</u> risks beyond the 25 SCF priority municipalities in the Cerrado.

Besides CRR, <u>Amazon Watch</u>, <u>Mighty Earth</u>, <u>Rainforest Foundation Norway</u>, <u>Fern</u>, and <u>others</u> have shown Bunge's deforestation links. Bunge, like Cargill, has reacted with updating its policies, but the timeline, the execution of its policies, and its connections to legal deforestation remain issues to be addressed. The reactive approach of soy traders could bring about a decline in their reputation value. A deteriorating reputation could impact the quality of the companies' personnel, their commercial relationships with certain customers, and ultimately their margins and profits. Particularly with Fast-Moving Consumer Good companies (FMCGs), <u>reputation risk</u> is a crucial factor that could significantly impact profit generation and the share price performance. Although less eminent, soy traders' reputation risk could impact enterprise value by double-digit percentages. Concerning Bunge, given that it is a publicly-listed company, the current valuation may be sensitive to reputation risk:

- The stock is now (28 October 2019) valued above its peers in P/E and EV/EBITDA, respectively, 12 percent and two percent. Bunge has a discount of 1 percent in EV/EBIT.
- However, based on a 5-year historical perspective, the stock is normally valued below its peers: respectively four percent in P/E, three percent in EV/EBITDA and three percent in EV/EBIT. If Bunge's P/E valuation declines from a 12 percent premium to a 4 percent discount, the loss in equity value would be USD 1.2 billion.

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