

## Cosan

## A deep dive into land management business

Maintain Rating: BUY | PO: 31.00 BRL | Price: 17.89 BRL

## Investing from the ground up

Cosan is a shareholder of one of the largest agriculture land management companies in Brazil (LandCo). Its partnership with Nuveen (a TIAA Company) controls over 200k hectares (he) and is valued at R\$13.9bn, according to the latest 3<sup>rd</sup> party appraisal. Cosan has a 30% stake on the business and the division represents 5% of our R\$31/share PO or 8% of Cosan's current market cap. We reiterate our Buy on Cosan on 1) solid balance sheet, helped by 2) declining interest rates, 3) potential value unlock from listing of subsidiaries and 4) new growth opportunities on Vale and the land business.

## Governance of the land business is highly complex

Cosan invests in land management using a complex partnership with Nuveen. The main investment vehicles are Radar, Janus and Tellus. Cosan has an economic stake of 41% at Radar and 19.6% at Janus and Tellus. The last two vehicles have preferred shares and Cosan has more than 60% of the ordinary shares in both. Such structure was put in place since Nuveen invests in the country with different partners under three different funds (Mansilla, TCGA and TCGA II) that have different levels of exposure to countries/crops.

## Exposure to Raízen is approximately 30% of LandCo

We estimate ~30% of the portfolio of Cosan being leased to Raízen, meaning that LandCo represents of 12% of Raízen's own cane fields. This relationship is key for Raízen to invest on the soil and improve yields over time.

## LandCo and SLC have a cross dependency of at least 15%

SLC is the second main operator of LandCo's lands, running at least 34k he. This means that at least 15% of SLC's total leased area is owned by LandCo. On the LandCo side, SLC leases approximately 14.5% of the land bank and 35% of the grain area. The two companies converge in terms of strategy as SLC wants to grow in an asset light way and LandCo is looking for opportunities to generate value by partnering with good operators.

Estimates(Dec) (BRL)	2021A	2022A	2023E	2024E	2025E
EPS	3.37	0.65	(0.54)	0.83	0.53
GAAP EPS	3.37	0.65	(0.54)	0.83	0.53
EPS Change (YoY)	632.6%	-80.7%	NM	NM	-36.1%
Consensus EPS (Bloomberg)			0.23	1.55	2.23
DPS	1.29	0.43	0.43	0.43	0.41
ADR EPS (US\$)	2.50	0.50	(0.44)	0.67	0.43
ADR DPS (US\$)	0.96	0.33	0.34	0.34	0.33
<b>Valuation (Dec)</b>					
P/E	5.3x	27.5x	NM	21.6x	33.8x
GAAP P/E	5.3x	27.5x	NM	21.6x	33.8x
Dividend Yield	7.2%	2.4%	2.4%	2.4%	2.3%
EV / EBITDA*	9.7x	22.3x	20.4x	12.5x	14.6x
Free Cash Flow Yield*	3.1%	8.1%	9.4%	12.9%	15.3%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 9.

21 August 2023

## Equity

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## Stock Data

Price (Common / ADR)	17.89 BRL / 14.42 USD
Price Objective	31.00 BRL / 26.00 USD
Date Established	19-Jun-2023 / 19-Jun-2023
Investment Opinion	C-1-7 / C-1-7
52-Week Range	13.45 BRL - 21.76 BRL
Market Value (mn)	33,527 BRL
Average Daily Value	24.89 BRL
Shares Outstanding (mn)	1,874.1 / 468.5
BofA Ticker / Exchange	CSAIF / SAO
BofA Ticker / Exchange	CSAN / NYS
Bloomberg / Reuters	CSAN3 BZ / CSAN3.SA
ROE (2023E)	-4.5%
Net Dbt to Eqty (Dec-2022A)	98.1%

TIAA - Teachers Insurance and Annuity Association of America

Cref - College Retirement Equities Fund

TCGA = TIAA-Cref Global Agriculture

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**Refer to important disclosures on page 10 to 13. Analyst Certification on page 8. Price Objective Basis/Risk on page 8.**

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Timestamp: 21 August 2023 06:00AM EDT

# iQprofile<sup>SM</sup> Cosan

## iQmethod<sup>SM</sup> – Bus Performance\*

(BRL Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	21.5%	3.4%	5.6%	6.2%	4.1%
Return on Equity	63.1%	6.4%	-4.5%	7.0%	4.4%
Operating Margin	120,817.7%	NA	NA	NA	NA
Free Cash Flow	1,023	2,702	3,146	4,318	5,131

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(BRL Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	0.2x	2.2x	NM	2.8x	5.2x
Asset Replacement Ratio	0.5x	0.2x	0.8x	1.0x	1.0x
Tax Rate	9.4%	134.3%	NM	37.6%	55.0%
Net Debt-to-Equity Ratio	88.1%	98.1%	113.7%	118.7%	119.4%
Interest Cover	7.9x	1.2x	1.0x	2.0x	1.7x

## Income Statement Data (Dec)

(BRL Millions)	2021A	2022A	2023E	2024E	2025E
Sales	5	0	0	0	0
% Change	482.9%	-100.0%	NA	NA	NA
Gross Profit	6,557	2,986	3,564	5,578	4,827
% Change	380.5%	-54.5%	19.4%	56.5%	-13.5%
EBITDA	6,630	2,873	3,139	5,150	4,381
% Change	773.5%	-56.7%	9.3%	64.1%	-14.9%
Net Interest & Other Income	(847)	(2,319)	(4,733)	(3,480)	(3,189)
<b>Net Income (Adjusted)</b>	<b>6,312</b>	<b>1,214</b>	<b>(1,014)</b>	<b>1,552</b>	<b>996</b>
<b>% Change</b>	<b>632.9%</b>	<b>-80.8%</b>	<b>NM</b>	<b>NM</b>	<b>-35.9%</b>

## Free Cash Flow Data (Dec)

(BRL Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	5,229	(238)	(4,523)	(69)	(607)
Depreciation & Amortization	17	14	14	15	15
Change in Working Capital	0	0	0	0	0
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	(4,213)	2,928	7,665	4,386	5,739
Capital Expenditure	(9)	(2)	(10)	(15)	(16)
<b>Free Cash Flow</b>	<b>1,023</b>	<b>2,702</b>	<b>3,146</b>	<b>4,318</b>	<b>5,131</b>
<b>% Change</b>	<b>255.5%</b>	<b>164.0%</b>	<b>16.4%</b>	<b>37.3%</b>	<b>18.8%</b>

## Balance Sheet Data (Dec)

(BRL Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	2,992	2,234	4,122	2,216	1,150
Trade Receivables	NA	NA	NA	NA	NA
Other Current Assets	3,893	24,146	21,601	22,701	23,782
Property, Plant & Equipment	68	59	56	56	57
Other Non-Current Assets	28,101	30,157	30,799	31,954	31,343
<b>Total Assets</b>	<b>35,055</b>	<b>56,596</b>	<b>56,578</b>	<b>56,927</b>	<b>56,332</b>
Short-Term Debt	NA	NA	NA	NA	NA
Other Current Liabilities	1,459	1,403	1,393	1,393	1,393
Long-Term Debt	15,981	25,088	28,880	28,963	28,309
Other Non-Current Liabilities	2,864	6,818	4,533	4,047	3,886
<b>Total Liabilities</b>	<b>20,305</b>	<b>33,309</b>	<b>34,806</b>	<b>34,403</b>	<b>33,588</b>
<b>Total Equity</b>	<b>14,750</b>	<b>23,287</b>	<b>21,772</b>	<b>22,524</b>	<b>22,744</b>
<b>Total Equity &amp; Liabilities</b>	<b>35,055</b>	<b>56,596</b>	<b>56,578</b>	<b>56,927</b>	<b>56,332</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 9.

## Company Sector

Food-Commodities

## Company Description

Cosan is a conglomerate operating in several different stakes in businesses within the energy and infrastructure segments through: 1) Raizen, a JV with Shell that operates in upstream and downstream of the biofuel supply chain, 2) Compass, a natural gas player, 3) Moove, a lubricant business in BZ and US, 4) Rumo, a rail concessionaire, 5) Vale, a leading iron ore mining company, 6) Radar, a land management business, and 7) Ligga, a potential JV on iron ore

## Investment Rationale

Cosan is a solid long-term holding. In the short term, the company should benefit from strong earnings growth at Raizen as well as from recovery at Comgas and Rumo. Going forward, the development of projects at Compass, Raizen and Rumo and investments through Cosan Investment could unlock value in the stock.

## Stock Data

Average Daily Volume	6,901,737
Shares / ADR	4.00

## Quarterly Earnings Estimates

	2022	2023
Q1	0.28A	-0.56A
Q2	-0.06A	-0.16E
Q3	0A	0.18E
Q4	0.44A	0E

# LandCo deep dive

## LandCo is 5% of Cosan's price objective

Cosan and Nuveen's lands are valued at R\$13.9bn, according to the latest 3<sup>rd</sup> party appraisal, in which Cosan has a 30% economic stake. We value the division at R\$2.9bn or R\$1.6/share at Cosan after the outstanding M&A payables of R\$1bn. As such, the land business represents 5% of our R\$31/share PO and 8% of the company's market cap.

### Exhibit 1: Cosan's sum of the parts

We estimate the land division to be 5% of our R\$31/share PO

Company	Fair Value			
	Equity value	Stake	Stake Cosan	R\$/share
Raizen	61,315	44%	26,979	14
Compass	26,364	88%	23,201	12
Rumo	46,857	30%	14,221	8
Moove	9,518	70%	6,663	4
<b>Core portfolio</b>	<b>144,054</b>	<b>-</b>	<b>71,063</b>	<b>38</b>
LandCo	14,300	30%	2,980	2
Ligga	850	100%	850	0
<b>Cosan Investment</b>	<b>15,150</b>	<b>-</b>	<b>3,830</b>	<b>2</b>
Net debt with preferred	(30,625)	100%	(30,625)	(16)
<b>Pre-Vale Valuation</b>			<b>44,268</b>	<b>24</b>
Vale	355,200	5%	17,916	10
<b>Post-Vale Valuation</b>			<b>62,185</b>	<b>33</b>
Corporate expenses	(5,084)	100.0%	(5,084)	(3)
<b>Final Valuation</b>			<b>57,101</b>	<b>31</b>

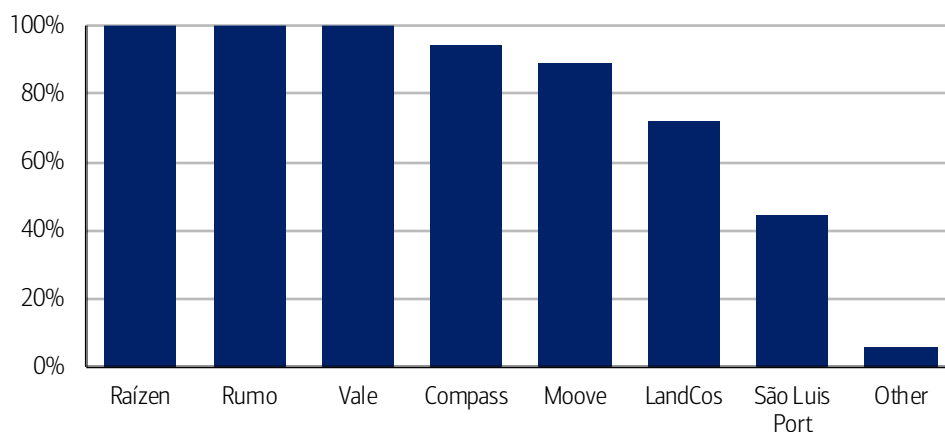
Source: BofA Global Research

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In our recent survey with 18 investors, we found 70% of the investors assign value to the division. We understand this sample consists of investors that look at the company closely, so the number of investors that actually value the land business could be even lower than that.

### Exhibit 2: Q: Which companies do you assign a value in Cosan's portfolio? (Please select all that apply)

30% of investors don't assume any value for the land division



Note: The survey of 18 local and foreigner investors was conducted between July 18 and July 21. We acknowledge that we might face selection bias in this survey, which might prevent the extrapolation of the conclusions presented below to the overall target population.

Source: BofA Global Research survey

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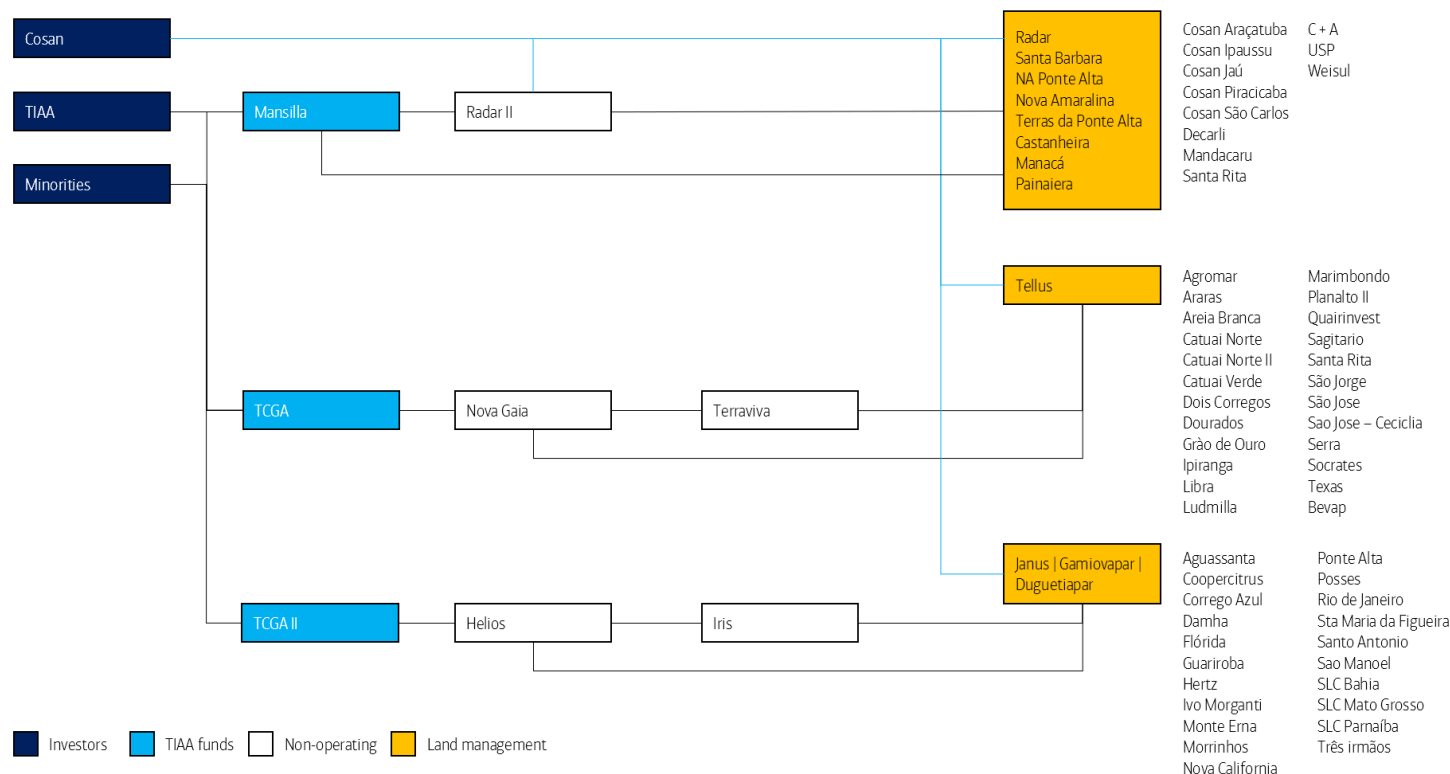
## Highly complex corporate governance

Cosan invests in land management using a complex partnership with Nuveen (a TIAA Company). The main investment vehicles are Radar, Janus and Tellus. Cosan has an economic stake of 41% in Radar and 19.6% in Janus and Tellus. The last two have preferred shares and Cosan has more than 60% of the ordinary shares in these companies.

The three investment vehicles are segregated as part of different funds managed by Nuveen: Mansilla, TCGA and TCGA II. Back in 2016, a filing by TIAA indicated its affiliated vehicles had 100% of Mansilla, 41% of TCGA and 11.7% of TCGA II.

### Exhibit 3: Corporate governance of the land division in Cosan

The three investment vehicles are split given the different funding of each of the companies



Source: Cosan, Nuveen, Brasil.IO and BofA Global Research

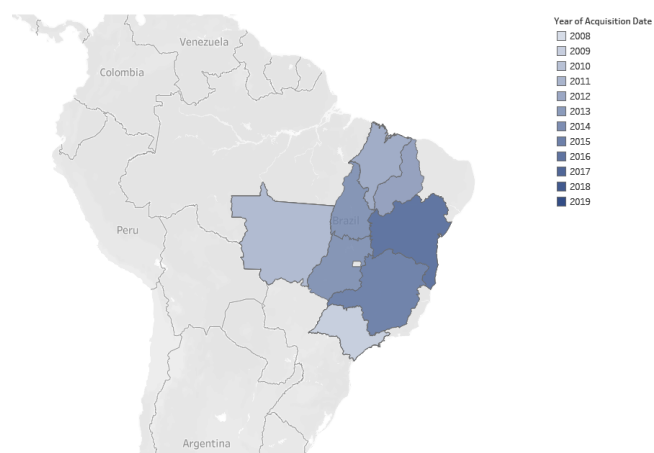
Note: Blue lines are direct investments of Cosan

Mansilla is the oldest with land fund in Brazil as it started to acquire land back in 2008. TCGA and TCGA II started running Brazilian operations in 2011 and 2014, respectively. The last land acquisition by any of the three funds took place in 2019. Today, Mansilla and TCGA II have a high exposure to sugarcane fields in Brazil, while TCGA is focused on grains.

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#### Exhibit 4: Geographic distribution of lands according to the year of purchase of farms per state

The last land acquisition in Brazil by Nuveen was in 2019

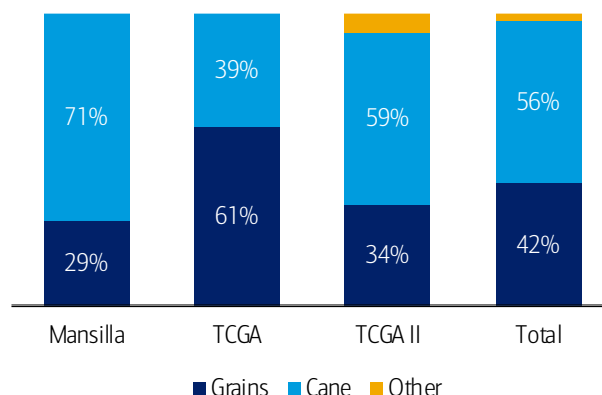


Source: Nuveen and BofA Global Research

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#### Exhibit 5: Distribution of crops per fund in Brazil

Cane is the largest crop in the lands managed by Nuveen and Cosan in the country



Source: Nuveen and BofA Global Research

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## Raízen and SLC are the main operators

We estimate ~30% of the portfolio of Cosan being leased to Raízen, meaning that LandCo represents of 12% of Raízen's own cane fields. This relationship is key for Raízen to invest on the soil and improve yields over time.

We estimate SLC is the second main operator of LandCo's lands, running at least 34k ha that we were able to identify as overlapping area. This means that at least 15% of SLC's total leased area is owned by LandCo. On the LandCo side, SLC leases approximately 14.5% of the land bank and 35% of the grain area. The two companies converge in terms of strategy as SLC wants to grow in an asset light way and LandCo is looking for opportunities to generate value by partnering with good operators.

#### Exhibit 6: At least 15% of the leased area by SLC is controlled by Nuveen/Cosan

There are six identified farms owned by LandCo that are leased to SLC

Nuveen / Cosan (LandCo)	SLC	Leased Area by SLC	Acquisition Date	State	Leased area by LandCo	% leased to LandCo
SLC Parnaíba	Parnaíba	10,907	1-Jun-13	Maranhão	6,756	62%
Catuai Verde	Planeste	16,593	1-Jun-13	Maranhão	9,235	56%
Catuai Norte	Palmeira	18,224	22-Aug-13	Goiás	3,202	18%
Araras/Celeiro	Pamplona	8,543	20-Dec-17	Mato Grosso	5,597	66%
SLC Bahia/Piauí	Parceiro	6,943	20-Dec-17	Bahia	5,256	76%
SLC Mato Grosso	Paiguás	17,319	12-Nov-19	Maranhão	4,114	24%
Other	Other	149,523			-	0%
<b>Total</b>		<b>228,052</b>			<b>34,160</b>	<b>15%</b>

Source: Nuveen, SLC and BofA Global Research

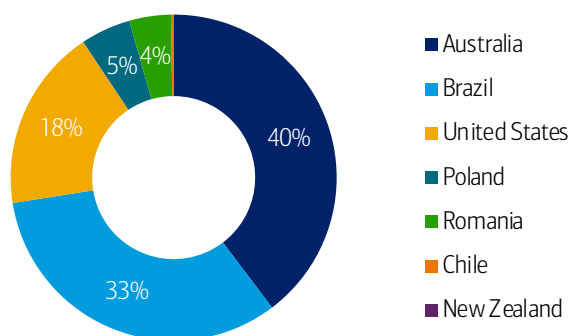
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## Nuveen is a land management giant

Nuveen's portfolio consists of approximately 700k hectares globally. Brazil is the second largest market with 33% of the land managed, behind Australia with a 40% share, and ahead of US with 18% share. Other exposure includes Poland and Romania with small investments in Chile and New Zealand. In the last three years, most of the investment of the company is going to US.

### Exhibit 7: Nuveen's land bank per country

Australia, Brazil and US are the main regions for Nuveen

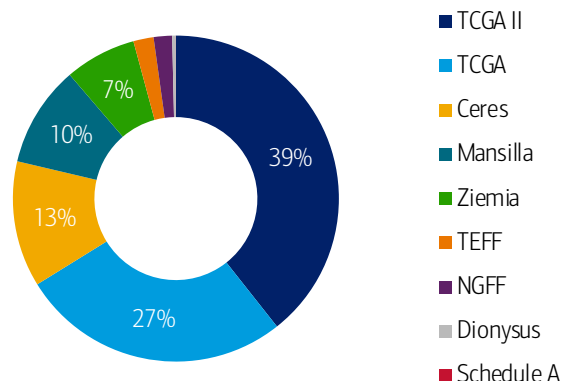


Source: Nuveen and BofA Global Research

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### Exhibit 8: Nuveen's land bank per fund

TCGA and TCGAII are the main funds of Nuveen



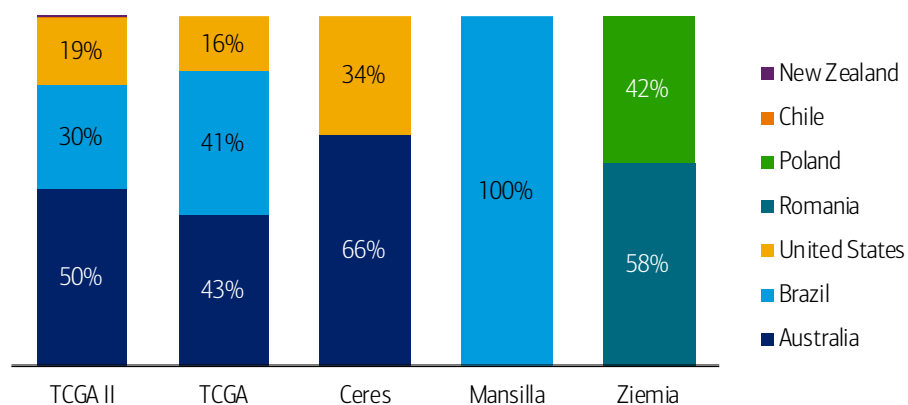
Source: Nuveen and BofA Global Research

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TCGA II and TCGA are the two main funds, concentrating 39% and 27% of the land managed. Other relevant funds are Ceres, Mansilla and Ziemia. Both TCGA funds are diversified between Australia, Brazil and US. Mansilla is 100% invested in Brazil, while Ceres and Ziemia have no exposure to LatAm.

### Exhibit 9: Nuveen's funds land bank per country

Brazil is a relevant investment for all funds that invest in the country



Source: Nuveen and BofA Global Research

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## Price objective basis & risk

### Cosan (CSAIF / CSAN)

Our PO is R\$31/share (\$26/ADR) is based on a sum-of-the-parts (SOTP) analysis. Our breakdown is 1) Raizen (R\$14/share, 100% DCF with 50% NPV of E2G projects). We assume a moving WACC weighted by EBITDA share of each business every year. Our WACC for Sugar is 11.5% in nominal BRL terms, 10.6% for renewables, 10.6% for Mobility in Brazil, 11.2% for Projects, 31.6% for Mobility in Argentina. 2) Compass (R\$12/share, 100% DCF based on FCFE with 14.4% Ke and 4% terminal growth rate (tgr) for Comgás, Sulgás, GasBraisliano, TRSP and the other distributors valued at EV/RAB of Comgás at a discount of 20% due to lower profitability), 3) Rumo (R\$8/share, 57-year DCF (FCFE), lasts until the last concession (2079), with Ke of 13.3%, in BRL nominal terms), 4) Moove (R\$4/share, 100% DCF, WACC of 11.6% with 4% terminal growth rate), 5) Cosan Inv (R\$2/share, Invested value in acquisitions of land companies and Atlántico), 6) Vale (R\$10/share, blended valuation excluding the additional debt raised to buy 4.9% stake in the company. We use a normalized hist average of 4.5x 2023E EV/EBITDA and our DCF at 12.3% WACC and tgr of 2.6%), and we exclude net debt (R\$16/share) and corp expense (R\$3/shr, 100% DCF of corp expense, WACC of 11.6% with 4% tgr).

Downside risks: 1) lower commodity prices 2) worse execution of Raizen's projects, 3) smaller-than-expected dividend payments from subsidiaries, 4) fiercer competitive environment in fuel distribution business and at Rumo, 5) execution problems at Rumo.

## Analyst Certification

We, Isabella Simonato and Guilherme Palhares, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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### Latin America - Agribusiness, Food & Beverage Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	3tentos	XTTUF	TTEN3 BZ	Isabella Simonato
	AmBev	ABEV	ABEV US	Isabella Simonato
	AmBev	AVBPF	ABEV3 BZ	Isabella Simonato
	Arca Continental	EMBVF	AC* MM	Fernando Olvera
	Bimbo	GRBMF	BIMBOA MM	Fernando Olvera
	CCU	XLUDF	CCU CI	Fernando Olvera
	CCU - ADR	CCU	CCU US	Fernando Olvera
	Coca-Cola Andina	AKOBF	ANDINAB CI	Fernando Olvera
	Coca-Cola Andina-ADR	AKOB	AKO/B US	Fernando Olvera
	Coca-Cola Femsá	KOF	KOF US	Fernando Olvera
	Coca-Cola Femsá	COCSF	KOFUBL MM	Fernando Olvera
	Cosan	CSAIF	CSAN3 BZ	Isabella Simonato
	Cosan	CSAN	CSAN US	Isabella Simonato
	Cuervo	BCCLF	CUERVO* MM	Fernando Olvera
	Gruma	GPAGF	GRUMAB MM	Fernando Olvera
	Minerva	MRVSF	BEEF3 BZ	Isabella Simonato
	Raizen	XUXIF	RAIZ4 BZ	Isabella Simonato



## Latin America - Agribusiness, Food &amp; Beverage Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>NEUTRAL</b>	BRF	BRFS	BRFS US	Isabella Simonato
	BRF	BRFFF	BRFS3 BZ	Isabella Simonato
	JBS	JBSAF	JBSS3 BZ	Isabella Simonato
	M. Dias Branco	XDMIF	MDIA3 BZ	Isabella Simonato
	Marfrig	MRRTF	MRFG3 BZ	Isabella Simonato
	Sao Martinho	SRTOF	SMT03 BZ	Isabella Simonato
	SQM	SQM	SQM US	Isabella Simonato
<b>UNDERPERFORM</b>	Adecoagro	AGRO	AGRO US	Isabella Simonato
	Camil Alimentos	XSREF	CAML3 BZ	Isabella Simonato
	Jalles Machado	XZNZF	JALL3 BZ	Guilherme Palhares
	SLC Agrícola	SLQJF	SLCE3 BZ	Guilherme Palhares

**IQmethod<sup>SM</sup> Measures Definitions****Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

**Quality of Earnings**

Cash Realization Ratio  
Asset Replacement Ratio  
Tax Rate  
Net Debt-To-Equity Ratio  
Interest Cover

**Valuation Toolkit**

Price / Earnings Ratio  
Price / Book Value  
Dividend Yield  
Free Cash Flow Yield  
Enterprise Value / Sales

EV / EBITDA

**Numerator**

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income  
Operating Profit  
Expected 5 Year CAGR From Latest Actual  
Cash Flow From Operations – Total Capex

**Numerator**

Cash Flow From Operations  
Capex  
Tax Charge  
Net Debt = Total Debt – Cash & Equivalents  
EBIT

**Numerator**

Current Share Price  
Current Share Price  
Annualised Declared Cash Dividend  
Cash Flow From Operations – Total Capex  
EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities  
Enterprise Value

**Denominator**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill  
Amortization  
Shareholders' Equity  
Sales  
N/A  
N/A

**Denominator**

Net Income  
Depreciation  
Pre-Tax Income  
Total Equity  
Interest Expense

**Denominator**

Diluted Earnings Per Share (Basis As Specified)  
Shareholders' Equity / Current Basic Shares  
Current Share Price  
Market Cap = Current Share Price × Current Basic Shares  
Sales

Basic EBIT + Depreciation + Amortization

*IQmethod<sup>SM</sup>* is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and valuations. The key features of *IQmethod* are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

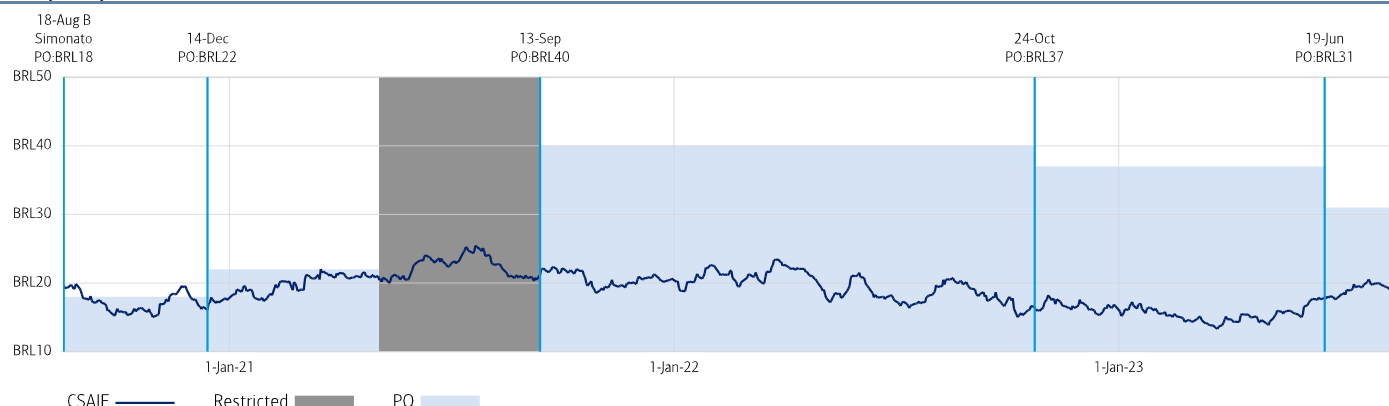
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### Cosan SA (CSAIF) Price Chart



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### Cosan (CSAN) Price Chart



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### Equity Investment Rating Distribution: Energy Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	84	61.76%	Buy	65	77.38%
Hold	28	20.59%	Hold	20	71.43%
Sell	24	17.65%	Sell	15	62.50%

### Equity Investment Rating Distribution: Food Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	33	47.83%	Buy	18	54.55%
Hold	15	21.74%	Hold	11	73.33%
Sell	21	30.43%	Sell	9	42.86%

### Equity Investment Rating Distribution: Global Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1877	53.28%	Buy	1040	55.41%
Hold	815	23.13%	Hold	464	56.93%
Sell	831	23.59%	Sell	385	46.33%

<sup>R1</sup> Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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