
CASE I: Technest Inc. – A Journey Towards Innovation

Founded in 1990 by tech enthusiasts, **TechNest Inc. began its journey as a small start-up in Silicon Valley, California. Specializing in computer hardware**, the company rapidly gained recognition for its cutting-edge innovations and reliable products. Under the visionary leadership of its founder, Mr. Andrew, TechNest quickly expanded its operations and product offerings.

In 2005, sensing the burgeoning demand for mobile technology, **TechNest made a strategic decision to diversify into the smartphone market.** The move was spearheaded by Ms. Chen, an experienced executive hired to lead the new division. With her expertise and market insights, Ms. Chen navigated TechNest into the smartphone industry with great success. The company's smartphones gained popularity for their sleek design, user-friendly interface, and advanced features, quickly capturing a significant share of the market.

However, by 2018, TechNest found itself facing unforeseen challenges. Despite its initial success, the **smartphone division began experiencing declining sales and stiff competition from emerging rivals.** Mr. Andrew, the founder, known for his traditional approach, was hesitant to embrace radical changes suggested by Ms. Chen to revamp the smartphone division's branding and marketing strategies.

By 2020, TechNest was grappling with **substantial losses in its smartphone division, and its foothold in the computer hardware market was also diminishing.** Mr. Andrew realized the urgent need for a turnaround and entrusted Ms. Chen with the task of revitalizing the company within a year.

CASE I: Technest Inc. – Additional Information

To revitalize TechNest, Ms. Chen considered two main strategies: Improve the smartphone division's performance or divest it to focus on the core computer hardware business. For both strategies, relative valuation methods were essential to make informed decisions.

Relative valuation involves comparing a company's valuation metrics (such as P/E, EV/EBITDA, P/S ratio) with those of similar companies. Here's how Ms. Chen approached it:

1. Identified Comparable Companies

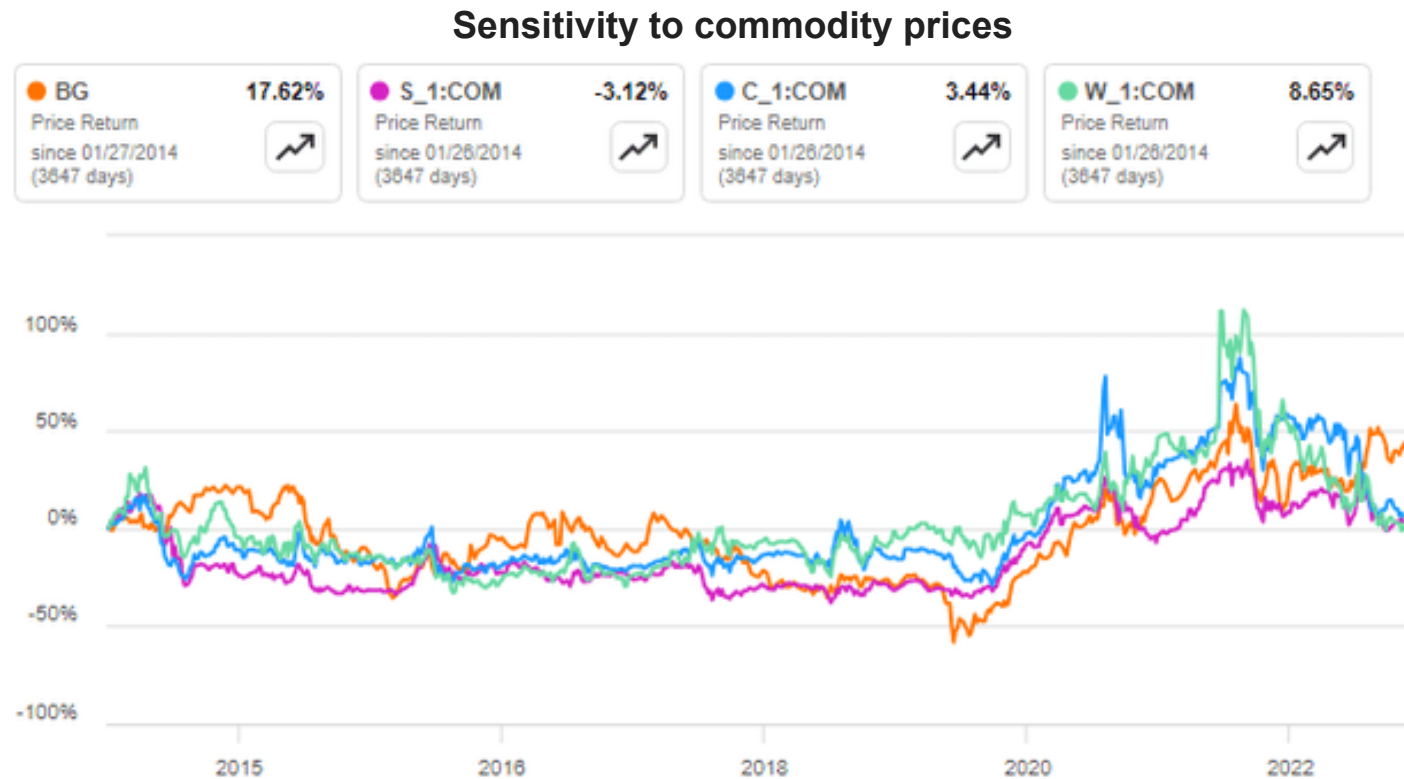
- Ms. Chen identified a set of comparable companies in both the smartphone and computer hardware industries.
- She collected financial metrics of these companies to perform relative valuation.

2. Computed Market Multiples

- For the smartphone division, Ms. Chen looked at companies like Apple, Samsung, and Xiaomi.
- For the computer hardware division, she analyzed companies like Dell, HP, and Lenovo.

CASE II: BUNGE (BG) – Background

- Bunge (BG) purchases agricultural commodities like soybeans, corn, wheat, sunflower, and rapeseed from farmers and intermediaries.
- The company engages in two main activities with these commodities: merchandising, which involves reselling them, and processing, where they transform the raw materials. For instance, soybeans are processed into soybean oil and soybean meal.



BG: Share price performance

S_1: Soybean futures

C_1: Corn futures

W_1: Wheat futures

CASE II: BUNGE (BG) – Additional information

- BG currently has operations in the United States, Europe, Asia-Pacific, Brazil, Argentina, Canada etc. and is looking to acquire a privately held agricultural product company in Brazil called AgriNova (AN).
- AN engages in the sourcing, processing and trading of agricultural commodities like sugar, rice, and oil and fat products. AN's results have a direct relationship with commodity prices.
- AN has been in operation for over 20 years and operates domestically.
- BG has started negotiations with AN on a potential acquisition of 100% stake.
- BG's management received a DCF valuation analysis done by AN internally as of 31 March 2024, which suggested an acquisition price of BRL 179,1 bn.
- Prior to the meeting with an independent valuation consultant, Mr. Jones from BG's inhouse corporate finance team is tasked with reviewing the valuation analysis. Assuming you are Mr. Jones, discuss your observations and the areas of concern on the valuation analysis and a recommended approach to address them.

CASE II: BUNGE (BG) – Discussion >> Spot the errors

DCF valuation as of 31 March 2024 BRL mn	2015	2016	2017	2018	2019	2020	2021	2022	2023	1.00	2.00	3.00
										2024E	2025E	2026E
Revenue	86,015	65,750	74,644	86,015	89,335	111,477	155,737	175,762	147,719	142,079	144,346	153,258
YoY growth	<i>nm</i>	-23.6%	13.5%	15.2%	3.9%	24.8%	39.7%	12.9%	-16.0%	-3.8%	1.6%	6.2%
EBITDA	3,509	2,559	1,901	2,851	3,480	5,677	7,777	8,525	8,639	9,661	11,259	13,487
EBITDA margin	4.1%	3.9%	2.5%	3.3%	3.9%	5.1%	5.0%	4.9%	5.8%	6.8%	7.8%	8.8%
Less: Depreciation & amortisation	(1,078)	(838)	(993)	(1,170)	(1,190)	(1,171)	(1,116)	(1,067)	(1,119)	(1,279)	(1,299)	(1,379)
As a % of revenue	1.3%	1.3%	1.3%	1.4%	1.3%	1.1%	0.7%	0.6%	0.8%	0.9%	0.9%	0.9%
EBIT	2,431	1,721	908	1,681	2,290	4,506	6,661	7,458	7,520	8,383	9,960	12,107
EBIT margin	2.8%	2.6%	1.2%	2.0%	2.6%	4.0%	4.3%	4.2%	5.1%	5.9%	6.9%	7.9%
EBIT*(1-t)	2,139	1,515	799	1,479	2,015	3,965	5,862	6,563	6,618	7,377	8,765	10,654
Add: depreciation & amortization	1,078	838	993	1,170	1,190	1,171	1,116	1,067	1,119	1,279	1,299	1,379
Less: Capex	(1,284)	(1,200)	(1,079)	(927)	(1,138)	(983)	(1,050)	(1,451)	(2,784)	(1,421)	(722)	(460)
As a % of revenue	1.5%	1.8%	1.4%	1.1%	1.3%	0.9%	0.7%	0.8%	1.9%	1.0%	0.5%	0.3%
Add dec / less inc in w inv	801	168	(780)	292	243	(1,543)	(1,940)	(22)	(1,505)	(750)	(530)	(400)
As a % of revenue	0.9%	0.3%	-1.0%	0.3%	0.3%	-1.4%	-1.2%	0.0%	-1.0%	-0.5%	-0.4%	-0.3%
FCFF										6,485	8,812	11,174
TV based on Gordon growth model												256,405
Discount factor										0.913	0.833	0.760
Present value of FCFF										5,918	7,339	8,493
Present value of terminal value												194,887
DCF firm value												216,637
Less net debt / add net cash												(37,500)
DCF equity value												179,137

CASE II: BUNGE (BG) – Discussion >> Spot the errors

DCF assumptions	Input
Terminal growth rate	5.0%
WACC	9.6%
Risk free rate of return	10.0%
Long term cost of debt	6.0%
Equity risk premium	5.0%
Beta	0.7
Tax rate	12.0%
Target debt to total capital	47.4%
Target equity to total capital	52.6%
Cost of equity	13.5%

Notes

- Risk free rate - Brazilian 2-year government bond yield as of 28 March 2024
- Beta - Derived by plotting the price trend of listed industry peers in the market vs the Bovespa Index
- Cost of debt - Yield-to Maturity of company's most senior secured debt
- Tax rate – Company enjoys a concessionary tax rate of 12.0% for the next 3 years, below the statutory tax rate of 15.0%
- Target capital structure - Current debt to capital ratio
- Long term GDP growth rate in Brazil is forecasted at 2.0%

Net debt and equity (BRL mn)	As of 31 Dec 2023	As of 31 Mar 2024
Total debt	24,225	50,000
Cash and cash equivalents	12,911	12,500
Equity	54,200	55,400
Net debt	11,313	37,500
<i>Debt to capital</i>	30.9%	47.4%

- It was also noted that AN has a land, not used for the operations of the business, with a market value of BRL 12 mn.