

# Pepsi Green Day Traders

Nick, Ethan, Ed, & Simen 11/4/2024



### **Business Overview**

Description	<b>PepsiCo, Inc.</b> engages in the manufacture, marketing, distribution, and sale of various beverages and convenient foods worldwide.
Products	Provides dips, cheese-flavored snacks, and spreads, as well as corn, potato, and tortilla chips; cereals, rice, pasta, mixes and syrups, granola bars, grits, oatmeal, rice cakes, and side dishes; beverage concentrates, fountain syrups, and finished goods; ready-to-drink tea, coffee, and juices; dairy products; and sparkling water makers and related products, and alcoholic beverages.
Customers	Serves wholesale and other distributors, foodservice customers, grocery stores, drug stores, convenience stores, discount/dollar stores, mass merchandisers, membership stores, hard discounters, e-commerce retailers and authorized independent bottlers, and others.
Founding	Founded in 1965 through the merger of <b>Pepsi-Cola Company</b> , created in 1893 by Caleb Bradham, and <b>Frito-Lay, Inc.</b> , established in 1961 by the merger of <b>Frito Company and H.W. Lay &amp; Company</b> .





### **Company Products**







### Stock Overview & Investment Thesis

Company Name:	PepsiCo, Inc.	Current Price:	\$ 165.59
Ticker:	PEP	Current Date:	11/01/2024
Sector:	Consumer Staples	Target Price:	\$ 176.71
Industry:	Food & Beverage	Target Date:	11/05/2024
Shares Out.:	1.4 Billion	Monthly Volume:	~5.3 Million
Market Cap.:	229 Billion	Beta:	0.55

### Investment Thesis: BUY 50 Shares PEP





## Industry Analysis

- Industry Defined The Food and Beverage Industry is a multi-trillion-dollar industry and captures all food and beverage goods produced and sold at market stores, restaurants, events, and other venues.
- Demand Demand for consumer staple goods are resilient to cyclical fluctuations, while consumer discretionary goods are less resilient. Seasonality also affects demand for certain goods. People need to eat.
- Growth Potential Consumers are increasingly more conscious about their health and emerging illnesses are influencing changes to dietary needs. General populations are growing, the more people there are, more to feed.
- **Competitive Landscape** Largely fragmented with several dominating international players owning the most recognizable brands, but with numerous smaller players offering competitive alternatives.
- Industry Regulation Subject to abide by health, safety, labor and environmental laws set forth by regulatory authorities worldwide.







## Performance History



THE UNIVERSITY OF UTAH

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## **Company Analysis**

- Competitive Advantage Large portfolio of the world's most recognizable brands, high food and beverage product diversity, strong customer loyalty, and inelastic product demand.
- Demand Effectively mitigates seasonal affects on sales with its wide range of diverse products. Staple products have inelastic demand to mitigate cyclical effects.
- Growth Potential Well positioned to quickly react to changing consumer preferences. Has access to large amounts of capital to acquire competing brands or emerging market players.
- Operational Efficiency Expansive supply chain which allows the company to leverage and benefit from economies of scale.
  Continuously invests in technology to reduce cost of sales and operational expenses. Generates and collects cash very quickly.

### PepsiCo Revenue by Segment **PBNA. 30%** FLNA, 27% QFNA, 3% **APAC**, 5% Europe, 14% AMESA, 7% LatAm, 13%

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## Pepsi VS Coke

Compound Annual Growth Rate %	5-YR PEP	5-YR KO	Spread	10-YR PEP	10-YR KO	Spread
Stock Price	1.5	0.4	1.0	6.0	3.4	2.6
Revenue	2.1	1.4	0.7	3.2	0.0	3.3
Gross Profit	2.0	1.3	0.7	3.4	-0.3	3.7
Op Income	1.8	1.6	0.2	3.0	2.0	1.0
Net Income	1.4	1.2	0.2	3.4	4.2	-0.8
EBITDA	1.7	1.3	0.4	3.1	1.4	1.7
Div per Share	1.8	0.9	0.6	6.9	4.2	2.7

#### PepsiCo Revenue by Industry Segment

![](_page_7_Figure_3.jpeg)

#### Why PepsiCo?

- Highly diversified product portfolio of both food and beverages
- Cash Conversion Cycle: **PEP = -17.5**, KO = 6.53
- Better dividend growth and yield
- Better overall growth

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# SWOT Analysis

### **Strengths**

- Brand Portfolio
- Brand Loyalty
- Global Distribution Network
- Diversified Product Mix
- Resilience to Economic Downturns

### **Opportunities**

- Growth Into Healthier Products
- Increasing Investment in Digital Marketing and E-Commerce
- Strategic partnerships and acquisitions
- Consumer spending optimism at 1 year high

### Weaknesses

- Dependence on the North American Market
- Health and wellness trends
- Large component of the portfolio is unhealthy products

#### **Threats**

- Intense Rivalry from Coca-Cola and niche brands
- Regulatory pressures on packaging Waste and Health Standards
- Supply chain disruptions

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# Valuation Assumptions

Valuation Date:	11/01/2024	N Forecasted Years:	5
Revenue Growth Method:	Perpetual	Rev. Growth Rate:	3.00%
Dividend Growth Method:	CAGR	Div. Growth Rate:	5.45%
WACC Calc. Method:	Bloomberg	WACC: Cost of Equity:	6.24% 6.64%
Exit EV/EBITDA Multiple:	18.0x	N Comparable Peers:	10

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# Valuation Model Outcomes

	Estimated Value Per Share	Model Weights
Unlevered DCF	\$ 183.91	30.0%
Levered DCF	\$ 172.49	20.0%
Comparable Company	\$ 184.15	20.0%
Precedent Transaction	\$ 172.98	20.0%
Dividend Discount	\$ 156.14	10.0%

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# Valuation Target Price

![](_page_11_Figure_1.jpeg)

Investment Management

![](_page_11_Picture_2.jpeg)

## Effect on the Portfolio

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# Conclusion

### • Recommendation: BUY 50 shares of PEP ~\$8,306.00

- Target price: \$176.71 -> 6.71% upside
- Reactive to market trends, acquires emerging competitors, enters new segments, and constantly innovates to increase growth
- One of the top leading companies in a highly competitive industry
- Large , well-diversified product portfolio
- Strong performance history with low volatility
- Beta: 0.55

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# **Overview of Valuation Models**

### **Unlevered DCF**

### **Levered DCF**

**Comparable Company** 

**Precedent Transaction** 

### **Dividend Discount**

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# **Unlevered Discounted FCF**

### **Unlevered Free Cash Flow:**

Also called **Free Cash Flow to the Firm (FCFF)**, is a multi-step calculation used in a Discounted Cash Flow analysis to estimate Enterprise Value (total firm value). FCFF is a hypothetical figure, an estimate of what it would be if the firm was to have no debt.

### **Corporate Finance Institute: Cash Flow Guide**

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# Levered Discounted FCF

### **Levered Free Cash Flow**:

Also called **Free Cash Flow to Equity (FCFE)**, is used in financial modeling to estimate the equity value of a firm. It only represents the cash flow available to equity investors (interest to debt holders has already been paid).

### **Corporate Finance Institute: Cash Flow Guide**

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# Comparable Company Analysis

### **Comparable Company Analysis**:

"**Comps**" for short, is a valuation methodology that looks at ratios of similar public companies and uses them to derive the value of another business. Comps is a relative form of valuation, unlike a Discounted Cash Flow (DCF) analysis, which is an intrinsic form of valuation.

### **Corporate Finance Institute: Comparable Company Analysis**

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# **Dividend Discount Model**

### **Dividend Discount Model (DDM)**:

A quantitative method of valuing a company's stock price based on the assumption that the current fair price of a stock equals the sum of all the company's future dividends discounted back to their present value.

### **Corporate Finance Institute: Dividend Discount Model**

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# Key Terms

#### **Performance Metrics**

- Alpha (α): Measures a strategy's performance relative to a benchmark. Positive alpha indicates outperformance.
- Sharpe Ratio: Risk-adjusted return based on total risk (Return Risk-Free Rate) / Standard Deviation.
- **Sortino Ratio**: Similar to Sharpe, but only considers downside risk, ignoring positive volatility.
- Information Ratio: Measures returns above a benchmark relative to the tracking error.
- **Treynor Ratio**: Risk-adjusted performance based on beta (Return Risk-Free Rate) / Beta.

#### Parameters

- Market Cap: Total value of a company's shares (Share Price × Total Shares Outstanding).
- **P/E Ratio**: Price-to-Earnings Ratio. Measures how much investors pay per dollar of earnings.
- **Rebalance**: Adjusting portfolio holdings to match the desired allocation (e.g., quarterly).

#### **Risk Measures**

- Beta ( $\beta$ ): Measures sensitivity to market movements. A beta of 1 means the stock moves with the market.
- **Idiosyncratic Risk**: Risk unique to a specific asset, not due to market movements (e.g., company-specific events).
- **Systematic Risk**: Market-wide risk that affects all securities (e.g., interest rate changes).
- Standard Deviation ( $\sigma$ ): Measures volatility by showing how much returns deviate from the average.
- **Max Drawdown**: The maximum observed loss from peak to trough during a specific period.
- SML (Small Minus Large): Measures the excess return of small-cap stocks over large-cap stocks.
- **HMB (High Minus Low)**: Measures the excess return of high book-to-market stocks over low book-to-market stocks

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# Key Terms continued

#### **Valuation Terms**

- EV = Enterprise Value: the measure of a company's total value. It looks at the entire market value rather than just the equity value, so all ownership interests and asset claims from both debt and equity are included. EV can be thought of as the effective cost of buying a company or the theoretical price of a target company (before a takeover premium is considered).
  - Simple EV = Market Capitalization + Market Value of Debt Cash and Equivalents
  - Extended EV = Common Shares + Preferred Shares + Market Value of Debt + Noncontrolling Interest – Cash and Equivalents
- **TV = Terminal Value**: the estimated value of a business beyond the explicit forecast period. It is a critical part of the financial model, as it typically makes up a large percentage of the total value of a business. There are two approaches to the DCF terminal value formula: perpetual growth and exit multiple.
  - Perpetual Growth: Used by Academics, assumes business will continue to generate Free Cash Flow at a normalized rate forever.
  - Exit Multiple: Used by Industry, assumes business is sold for a multiple of some metric, typically EBITDA, based on currently observed comparable trading multiples.
  - TV = Financial Metric (i.e. EBITDA x Trading Multiple)

- RV = Relative Valuation: Models are used to value companies by comparing them to other businesses based on certain metrics such as EV/Revenue, EV/EBITDA, and P/E ratios. The logic is that if similar companies are worth 10x earnings, then the company that's being valued should also be worth 10x its earnings. The two most common types of relative valuation models are comparable company analysis and precedent transactions analysis.
- EBITDA = Earnings before Interest, Taxes, Depreciation, and Amortization:
  - The EBITDA metric is a variation of operating income (EBIT) that excludes certain non-cash expenses. The purpose of these deductions is to remove the factors that business owners have discretion over, such as debt financing, capital structure, methods of depreciation, and taxes (to some extent). It can be used to showcase a firm's financial performance without the impact of its capital structure.
  - EBITDA is not a recognized metric in use by IFRS or US GAAP. In fact, certain investors like Warren Buffet have a particular disdain for this metric, as it does not account for the depreciation of a company's assets.

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# Key Terms continued

#### **Valuation Terms Continued**

- NOPAT = Net Operating Profit After Tax: NOPAT stands for Net Operating Profit After Tax and represents a company's theoretical income from operations if it had no debt (no interest expense). NOPAT is used to make companies more comparable by removing the impact of their capital structure. In this way, it's easier to compare two companies in the same industry (i.e., one with no leverage and the other with significant leverage).
- **Spread**: The difference or gap between two related values, such as buying or selling prices.
- CAGR = Compound Annual Growth Rate: The measure of an investment's annual growth rate over time, with the effect of compounding considered. It is often used to measure and compare the past performance of investments or to project their expected future returns.
  - CAGR = (Ending Value/Beginning Value) ^ (1/No. of Periods) - 1.

- WACC = Weighted Average Cost of Capital: Used in financial modeling as the discount rate to calculate the net present value of a business. More specifically, WACC is the discount rate used when valuing a business or project using the **unlevered free cash** flow approach. Another way of thinking about WACC is that it is the required rate an investor needs to consider investing in the business.
- Unlevered versus Levered:
  - Levered cash flow is the amount of cash a business has after it has met its financial obligations.
  - Unlevered free cash flow is the money the business has before paying its financial obligations.
  - It is possible for a business to have a negative levered cash flow if its expenses exceed its earnings.
- Bloomberg's Debt Adjustment Factor: Represents the average yield above government bonds for a given rating class. The lower the rating, the higher the adjustment factor. The debt adjustment factor (AF) is only used when a company does not have a fair market curve (FMC). When a company does not have a credit rating, an assumed rate of 1.38 (the equivalent rate of a BBB+ Standard & Poor's long term currency issuer rating) is used. The exact calculation of the debt adjustment factor is a Bloomberg proprietary calculation.

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