



FIN 589

Applied Portfolio Management

Cyclical & Optimization Group



Team Members

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Youdhister Koneni

Gurpratap Thind

Recommendation Summary

Hold for its dividend and stability and...

EPD

Buy a protective put to prevent the downside risk

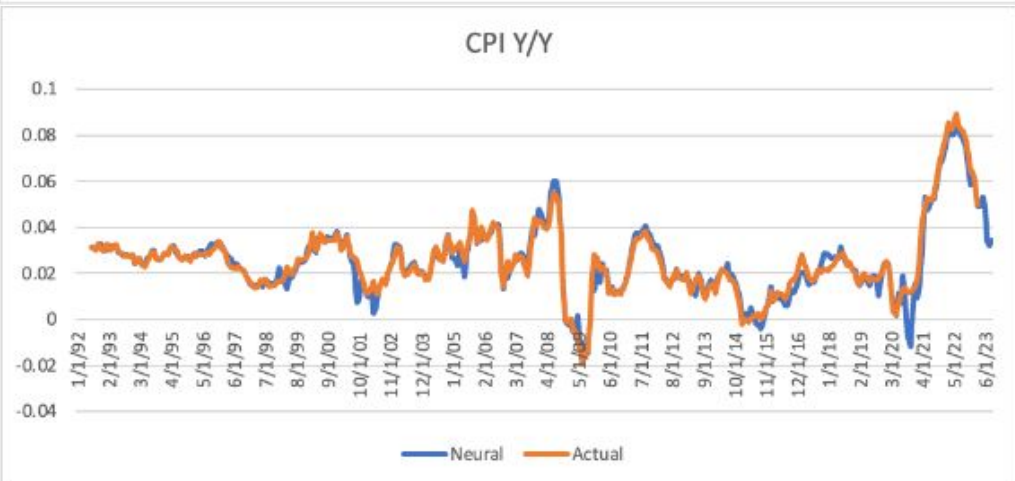
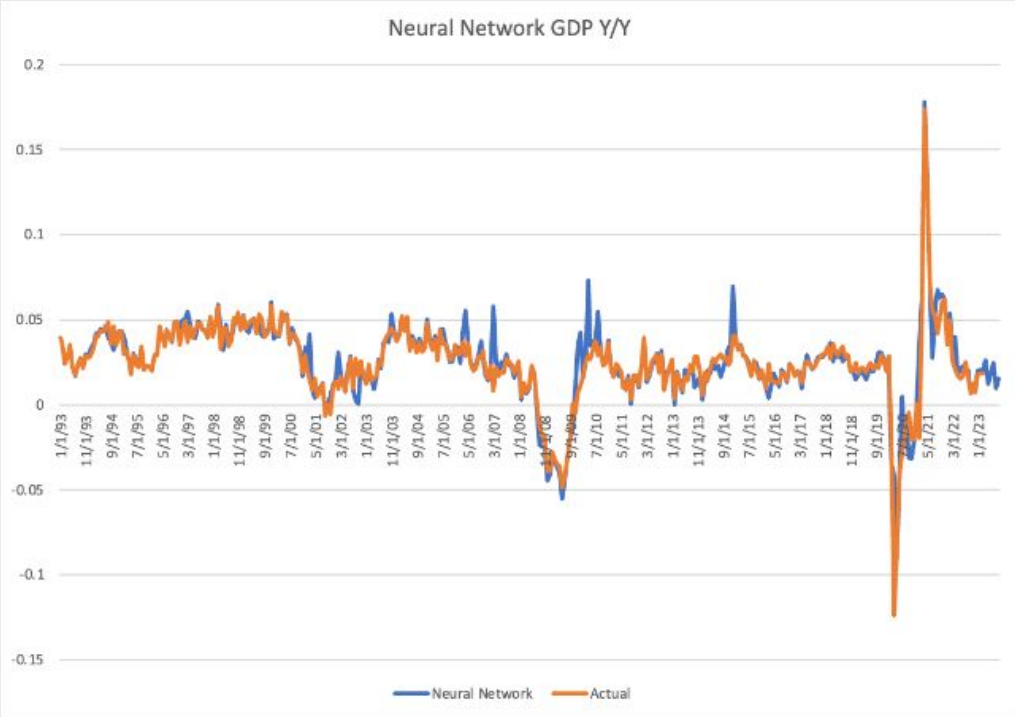
EPD

Enter into a long position while its price is low

NTR

Economic Model and Forecast

	Real GDP [Y to Y]	CPI [Y to Y]
4/2023	2.58%	4.94%
5/2023	1.22%	5.31%
6/2023	1.90%	4.86%
7/2023	2.44%	3.41%
8/2023	0.98%	3.21%
9/2023	1.53%	3.43%
R^2	0.85336001	0.95015886



Enterprise Product Partners: Midstream Industry Analysis and Trends

Sectoral Tailwinds:

High Demand-Contained Supply: Global oil and gas CAPEX is down 70% going back 10 years. The combination of increasing global energy demand and disciplined energy supply keeping commodity prices strong.

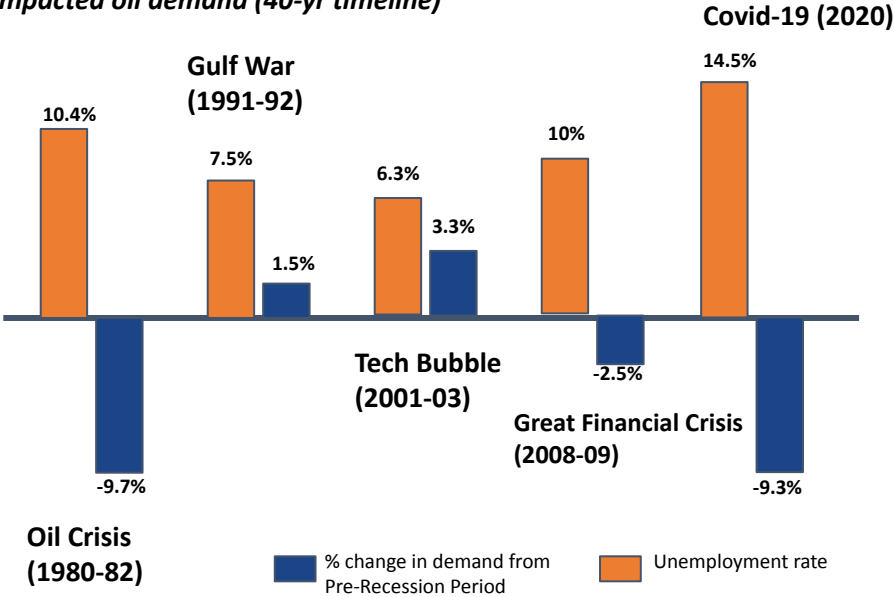
Growth-Inflation Dynamics: Stagflation positively impacts commodity prices, deflation only marginally impacts energy demand typically.

Fee-based Compensation: Consistent revenue from fees regardless of pipeline usage based on long-term contracts

Stable Sectoral Dynamics: Mature industry with consistent free cash flow generation; loose oligopoly with 15 major players and few minor players.

Strong Dividend: 6% dividend yield on average among midstream companies; good income stream

Historically, only unemployment levels of 10% or above have materially impacted oil demand (40-yr timeline)



Present and Potential Challenges



Strict regulation when building new pipelines; litigation challenges with pipeline leaks



30% of industry debt is short-term so subject to interest rate risk



Third-party owned land usage pose risk of disruption



Commodity-based revenue subject to commodity price risk

Enterprise Product Partners: Company Summary and Valuation

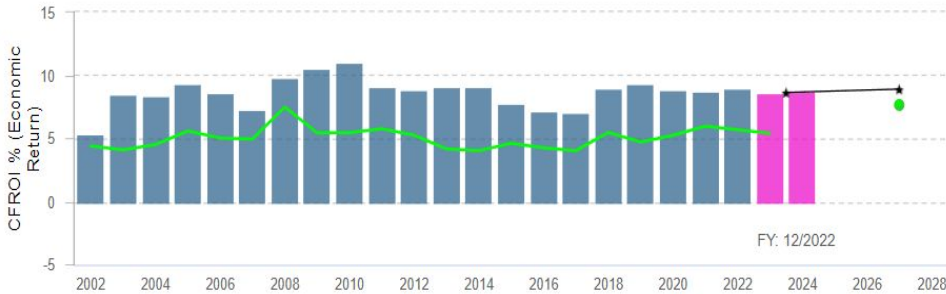
Company Highlights

Market Cap USD 58.6 billion

Share Price USD 26.69

Dividend Yield 7.9%

Dividend Coverage 1.8X



Consistent CFROI above Discount Rate

Investment Drivers

Strong Dividend Yield: Third highest dividend yield amongst top 15 midstream companies- 350 basis points above 10 year treasury bonds; Dividend Coverage to free cash flow among the highest in the industry (industry mean 1.4X)

Diversified Revenue Streams: While commodity based compensation is subject to price risk, fee based compensation deploy a ‘pay regardless of usage’ policy so is a consistent stream of revenue

Systemically Important: Second largest midstream asset base in the US with 50,000 miles of natural gas, natural gas liquids, crude oil, and refined product pipelines.

Valuation: HOLD with Protective Put

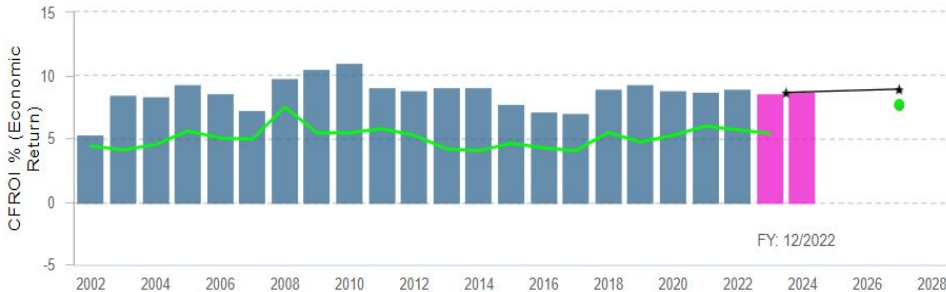
	Discounted Cash Flow	HOLT Lens	Probability	Put
Bull: Stagflation	USD 35-37 (35% ↑)	USD 36-38 (38% ↑)	50%	Strike: USD 24
Base: Reflation	USD 28-29 (6% ↑)	USD 28-30 (7% ↑)	20%	Price: USD 0.49
Bear: Deflation	USD 16-17 (-36% ↓)	USD 18-19 (-31% ↓)	30%	Expiry: September 15, 2023

Reward to Risk Ratio: 1.1x

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	Discounted Cash Flow	HOLT Lens	Probability	
Bull: Stagflation	USD 34-36 (35% ↑)	USD 35-37 (38% ↑)	50%	Reward to Risk Ratio with Put applied: 3.02x
Base: Reflation	USD 27-28 (4% ↑)	USD 27-29 (5% ↑)	20%	
Bear: Deflation	USD 23.51 (-12% ↓)	USD 23.51 (-12% ↓)	30%	

Industry Analysis : Fertilizer and Agricultural chemicals

Threat of

New Entrants: **LOW**

- Brand Power
- Capital and costs
- Distribution Network

Threat of

New products/Substitutes: **LOW**

- New tech required
- Crop yield capacity

Threat of

Existing rivals/competitors: **HIGH**

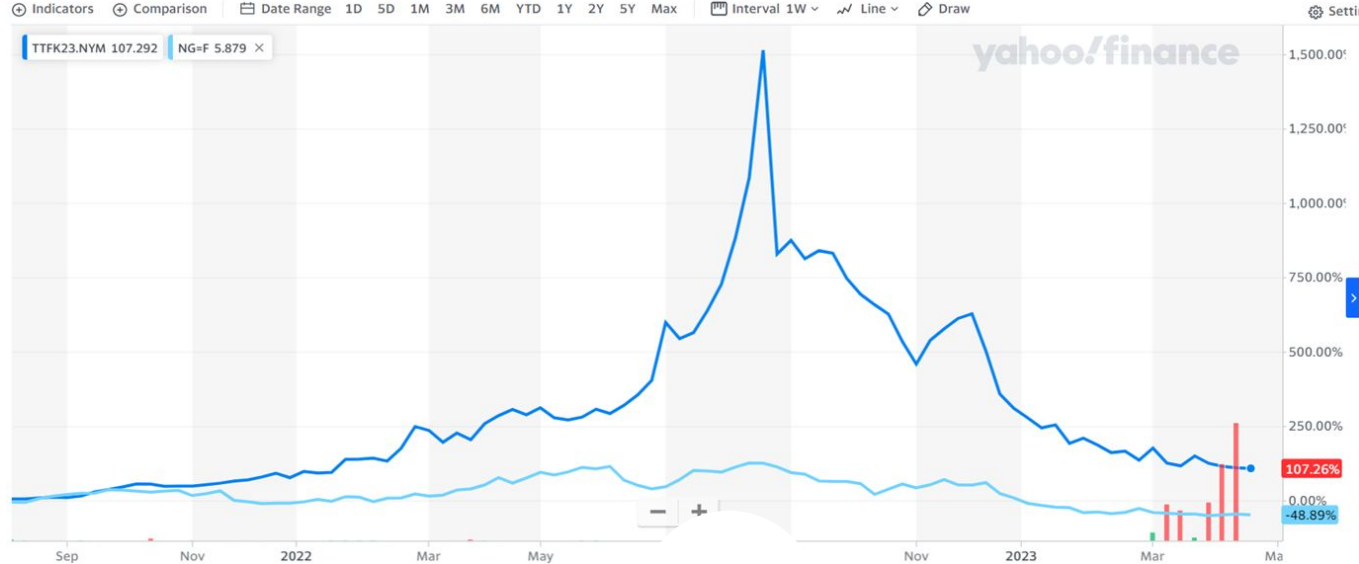
- Oligopolistic market
- NTR holds 25% of market share
- Supply chain disruption
- EU vs US Natural gas

Dutch TTF Natural Gas Calendar (TTFK23.NYM) ☆

NY Mercantile - NY Mercantile Delayed Price. Currency in EUR

40.50 +0.67 (+1.67%)

As of April 21 11:19AM EDT. Market open.



Bargaining power of Consumers:

LOW

- Key for agriculture
- Required for yield
- Quality reliance

EU vs US Natural gas

Bargaining power of Suppliers:

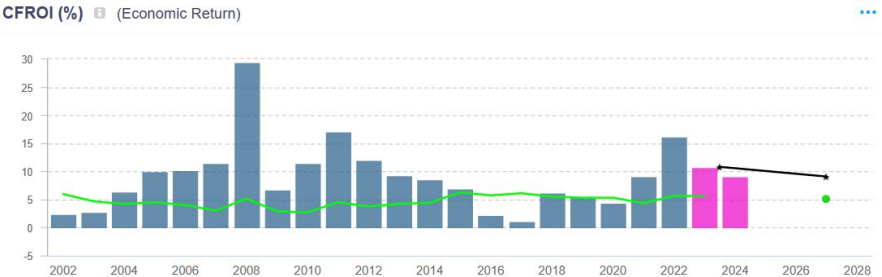
MODERATE

- Alternate materials exist
- Low number of suppliers

Nutrien LTD: Company Summary and Valuation

Company Highlights

Market Cap	USD 37 billion
Share Price	USD 72.10
Dividend Yield	2.91%
HOLT PE ratio	8.2X



CFROI Rises above Discount Rate

Investment Drivers

Great Cyclical Stock: Historically performs well during high inflation period. Our economy prediction model says we are heading towards stagflation, suggesting it would reach another peak in the near future.

Beneficiary of Geopolitical Conflicts: Experienced a boom after Russia-Ukraine War for Russia used to be a major supplier in fertilizer industry. Its warranted prices was three times as its market price at peak.

Valuation: Buy

	Discounted Cash Flow	HOLT Lens	Probability	Risk/ Reward Ratio
Bull: Stagflation	USD 108.61 (51% ↑)	USD 111.44 (55% ↑)	50%	2.38x
Base: Reflation	USD 88.58 (23% ↑)	USD 83.07 (15% ↑)	20%	
Bear: Deflation	USD 56.73 (-21% ↓)	USD 58.77 (-18% ↓)	30%	

Nutrien LTD: HOLT Analysis

Bull

Low sales growth
High margin and EBITDA
Positive asset growth



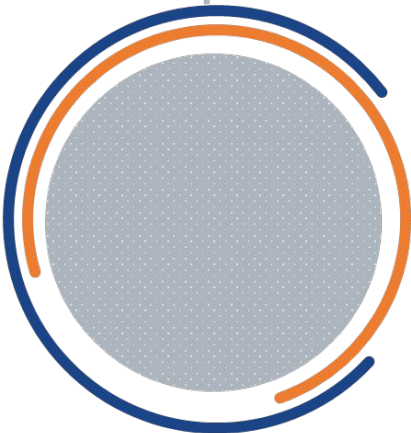
Base

Mildly decreasing sales growth
Low margin and EBITDA
Negative asset growth for sales drop

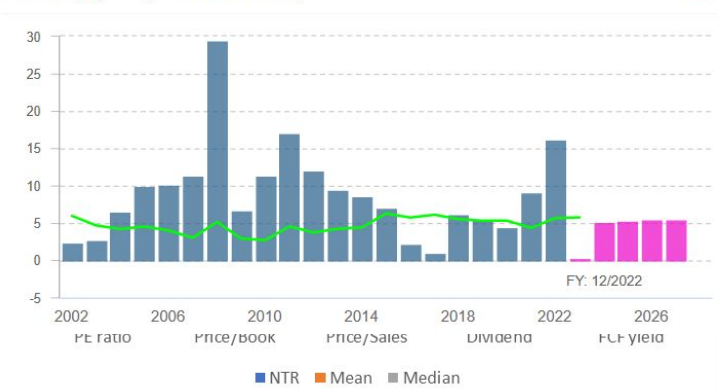


Bear

Low sales growth
Low margin and EBITDA
Barely positive asset growth



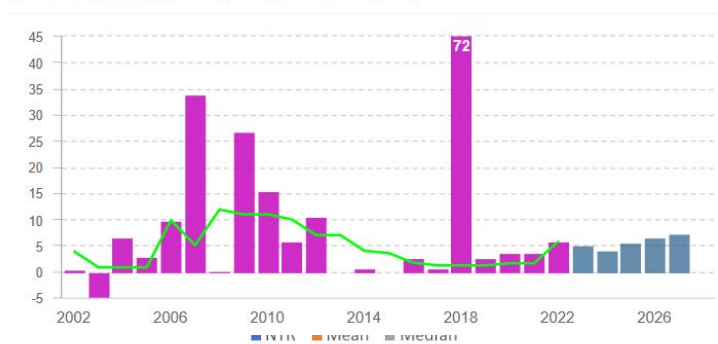
CFROI (%) (Economic Return)



Sales Growth (%) (Nominal)



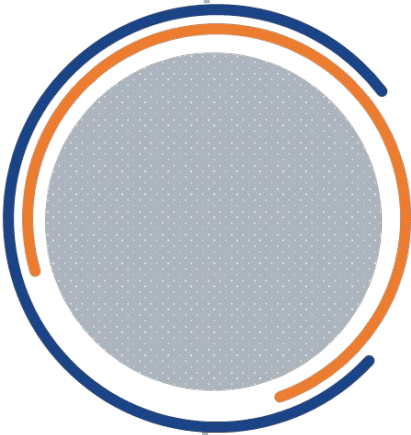
Asset Growth (%) (Change In Inv. Capital)



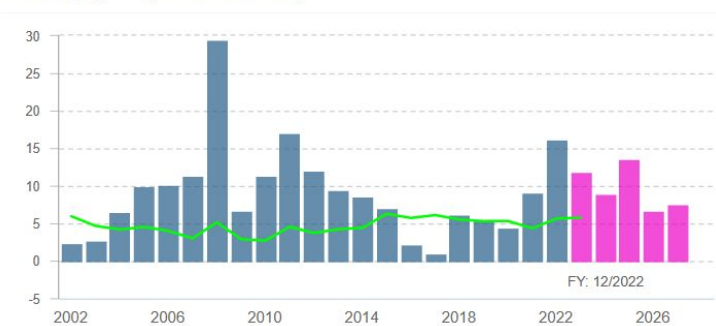
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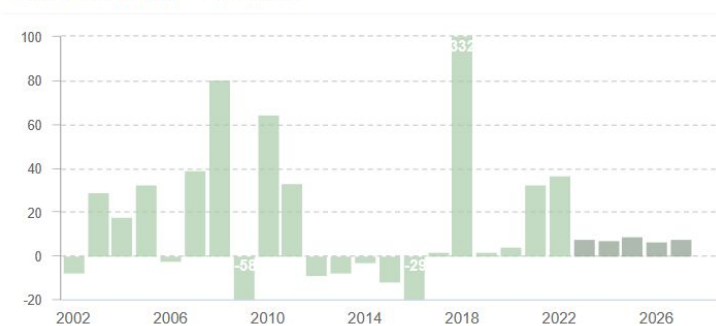
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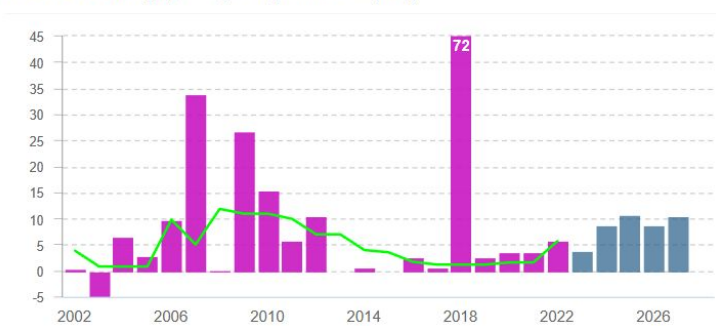
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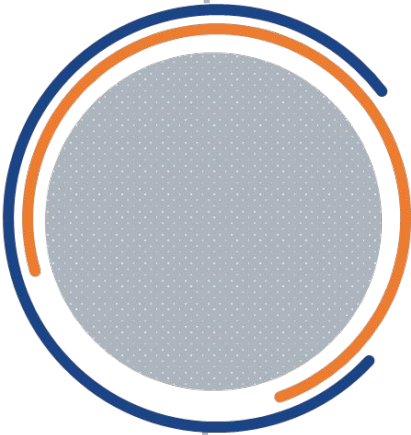
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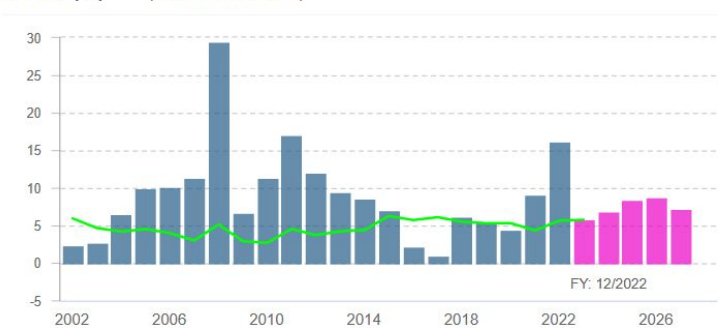


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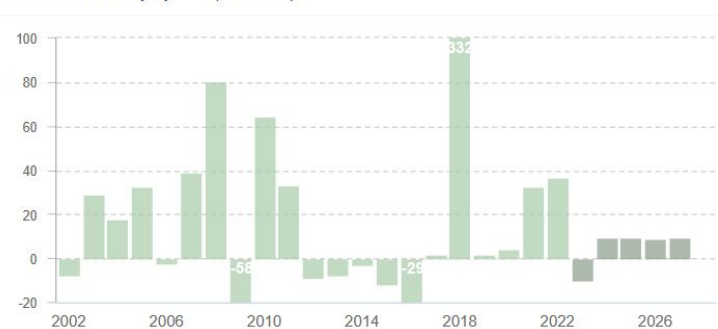
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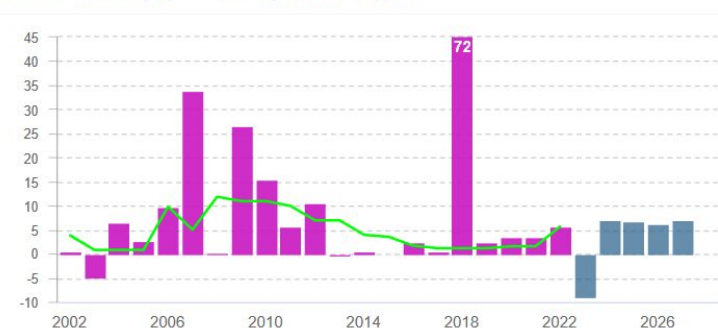
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Sales Growth (%) (Nominal)



Asset Growth (%) (Change In Inv. Capital)



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Bull

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Positive asset growth



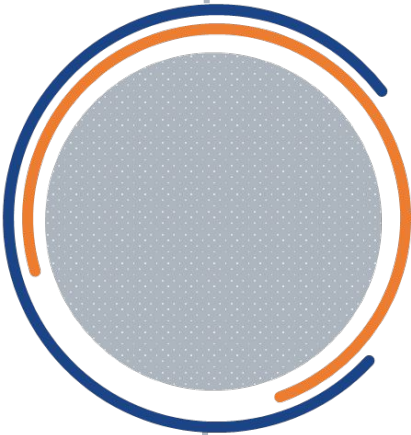
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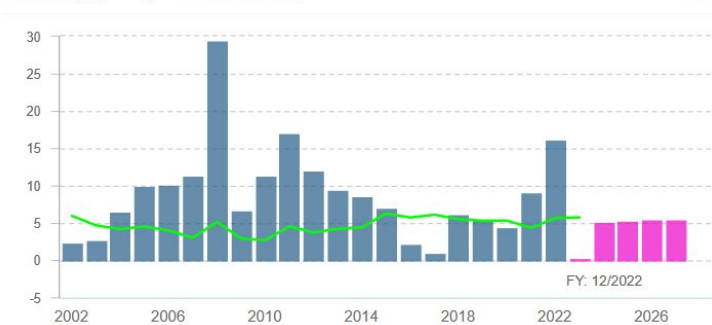


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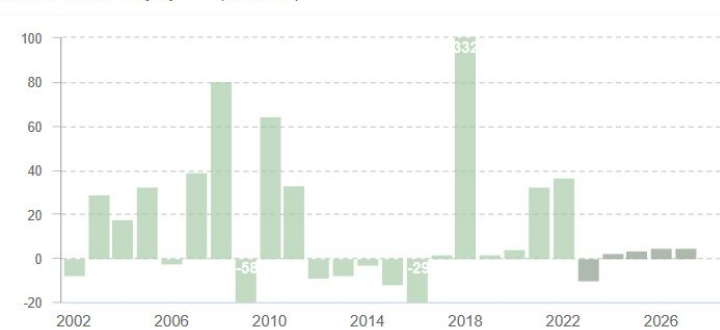
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Low margin and EBITDA
Barely positive asset growth



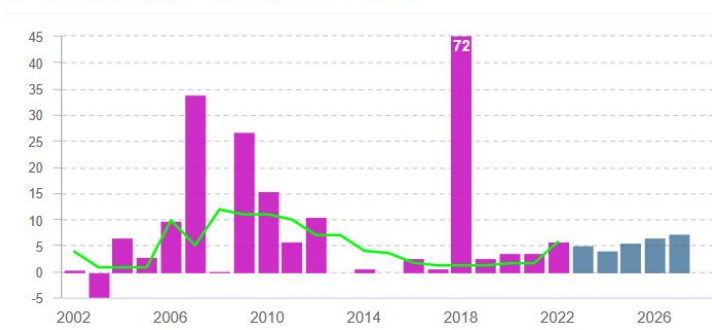
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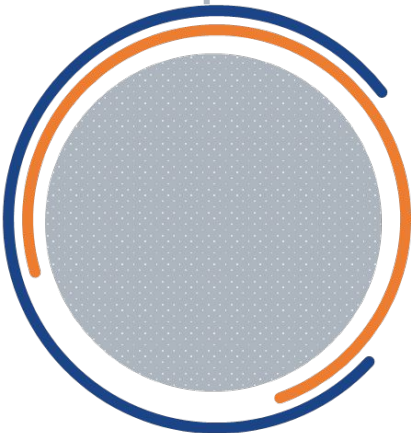
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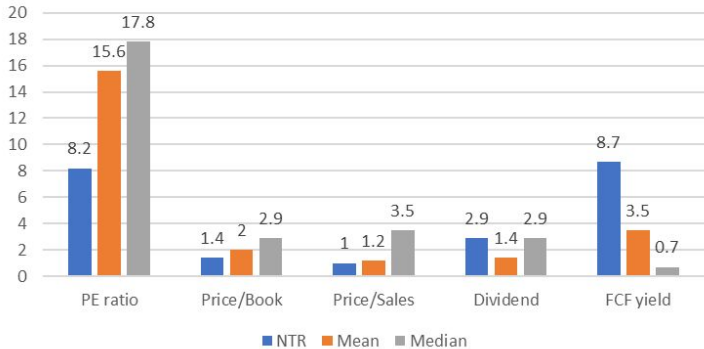


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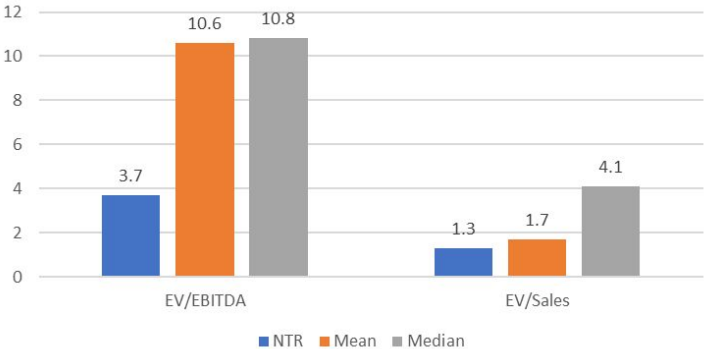
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Multiples I



Multiples II



Nutrien LTD: DCF Analysis



Expected value: \$ 89.04

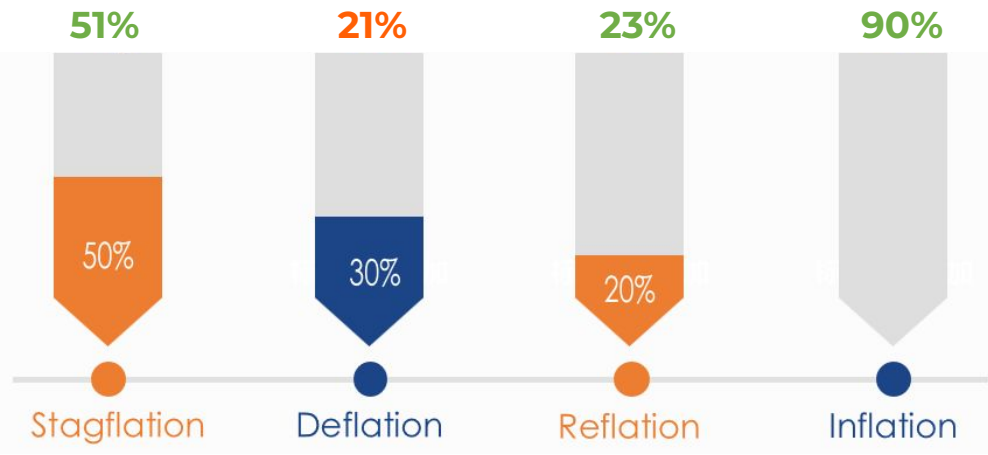


Expected Return: 25.1%



Risk-Reward Ratio: 2.38

Significant Upside Gain
with
Acceptable Downside Risk



Scenario	Revenue	COGS	Selling	G&A	R _f	Risk Premium
Stagflation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deflation	(5.0%)	8.0%	4.0%	0.5%	(1.0%)	2.0%
Reflation	2.0%	4.0%	2.0%	0.3%	(0.5%)	1.0%
Inflation	5.0%	(5.0%)	(0.5%)	(0.2%)	1.0%	(1.0%)

Nutrien LTD: DCF Analysis



Expected value: \$ 89.04



Expected Return: 25.1%



Risk-Reward Ratio: 2.38

Significant Upside Gain
with
Acceptable Downside Risk

51% 21% 23% 90%



Stagflation

Deflation

Reflation

Inflation

Assumptions

- Using sector median as mid cycle growth rate
- Terminal growth is based on industry life cycle
- COGS, tax rate, Capex, and working capital based on guidance and historical data
- Using previous year's data for scenario analysis, impacts gradually converge to 0
- Significant upside with acceptable downside risk

Summary of Recommendations

Company Name	Buy/Sell/Hold	Options
 Enterprise Products Partners L.P.	 HOLD	Protective Put
	 BUY	No options recommended



Thank You

Q&A

Cyclical & Optimization Group