# Reinvest in Yourself Alpha Bet

Jake Bauman, Kyle Klinger, James VanDam, Zack Lombardi

11/24/2025

#### Summary

Idea – Invest in high R&D, low dividend yield companies to reflect reinvesting in the company to promote profitability within the tech sector

Origin – Factor Investing in the Technology Sector (Glimne, Fayad)

Strategy – Using R&D and Dividend Yield factors to find companies focused on expanding growth

Historical Performance – Total return **3yr: 149.54%, 10yr: 724.58%** (CAGR: 18.26)

Recommendation – Buy \$48k, In School Fund, Sell Strategy NVDA

What to Sell – Sell NVDA due to too much concentration and overallocation in position

Effect on Portfolio – *Increase Volatility, but increases Sharpe* 





#### Strategy Details

#### The strategy is simple:

- High R&D
- Low dividend per share
- Performs best in tech sector

12 Positions

Average mkt cap with MSFT: \$387B | w/o MSFT: \$104B

Average dividend yield: 1.59%





## **Backtesting Implementation Details**

# OF STOCKS	12
MARKET CAP	NO REQUIREMENT
WEIGHTING SCHEME	EQUAL
REBALANCING FREQUENCY	QUARTERLY
TIME FRAME	10 YEARS
CURRENCY	USD





## **Backtesting Results - Characteristics**

10-Year Analysis	Mean (M)	Min	25%	Median	75%	Max
Market Cap (\$Millions)	387,835	14,415	42,827	86,185	184,747	3,500,000
P/E Ratio	24.7	13.6	20.95	24.2	28.5	43.2
Monthly Trading Volume (\$Millions)	3,907	.102	.819	1,241	4,814	22,340
Share Price	413.16	159.4	191.57	267.47	615.39	1,097.12





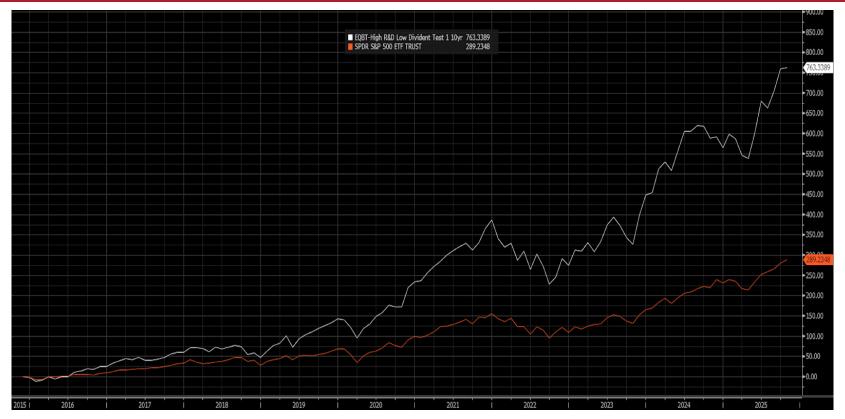
# Filtering Criteria

Security Universe	1598113
Trading Status: Active	576370
Security Attributes: Show Primary Security of company only	83319
Exchanges: United States	14883
Sectors (BICS): Technology	1313
Top 25 Sequential Percentile Rank - Higher is Better(T12M R&D Expense Adjusted)	134
Bottom 10 Sequential Percentile Rank - Lower is Better(T12M Dividend Per Share)	12





## Backtesting Results – 10yr Performance



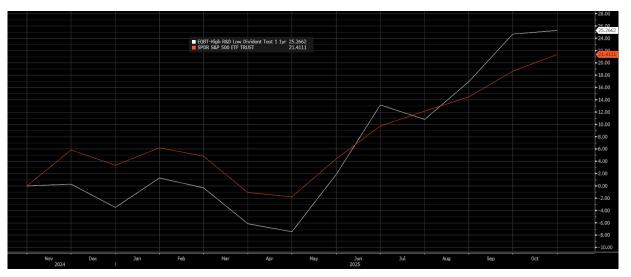
Annualized	Return	α*	β*	σ	Sharpe	Treynor	Max DD	Info Ratio*	Idio. Risk
10 Year	26.30%	7.55	1.26	26.13	0.98	.16	-36.34%	0.71	.20
10 Year SPY	14.24%	-	1	13.28	0.87	.17	-14.62%	-	-



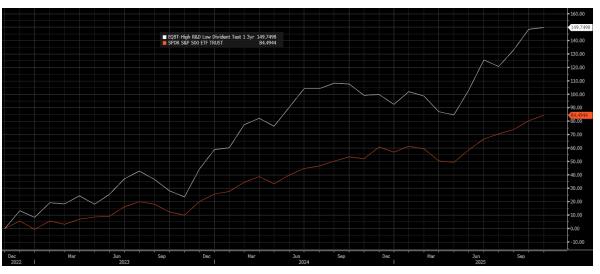


#### Backtesting Results – 1yr & 3yr Performance

1 year



3 year



<u>Annualized</u>	Return	α*	β*	σ	Sharpe	Treynor	Max DD	Info Ratio*	Idio. Risk
1 Year	25.27%	0.22	1.34	28.37	0.93	.16	-24.70%	0.38	.17
1 Year SPY	16.8%	0	1	17.09	0.63	.29	-2.91%	-	-
3 Year	35.68%	8.01	1.36	26.36	1.36	.23	-27.39%	0.86	.19
3 Year SPY	20.74%	0	1	13.61	1.37	.19	-8.25%	-	-





#### Recommended Purchases

	Ticker	P/E Ratio	Monthly Trading Volume (\$M)	Market Cap (\$M)	Share Price	# of Shares	Total Value
Seagate Technology	STX	20.6	2,272,442	51,742	237.49	217.87M	\$4,000
KLA Corp	KLAC	30.5	951,973	14,415	1,097.12	132.03M	\$4,000
Monolithic Power Systems	MPWR	43.2	819,166	41,070	872.35	47.91M	\$4,000
IBM	IBM	23.9	819,166	279,300	297.44	933.9M	\$4,000
Microsoft	MSFT	29	22,340,405	3,500,000	472.12	7.433B	\$4,000
Analog Devices	ADI	24.5	2,747,848	110,790	232.32	491.96M	\$4,000
Qualcomm	QCOM	13.6	8,042,101	186,330	173.98	1.07B	\$4,000
Intuit	INTU	27	1,252,601	180,000	663.15	278.8M	\$4,000
Garmin	GRMN	22	804,629	36,000	192.23	192.3M	\$4,000
NXP	NXPI	13.9	102,682	48,100	191.35	252.17M	\$4,000
Texas Instruments	TXN	25.4	5,502,812	144,700	159.40	908.6M	\$4,000
Motorola	MSI	23.1	1,231,328	61,580	368.99	166.55M	\$4,000





## Sell Proposal

- Sell NVDA
- The fund currently has ~\$105,000 invested in NVDA
- This represents roughly 5% of our total portfolio

	NVDA	Strategy
Sharpe	1.87	0.98
σ	49.86%	26.13%
β	1.8	1.26
CAGR	68.7%	18.26%

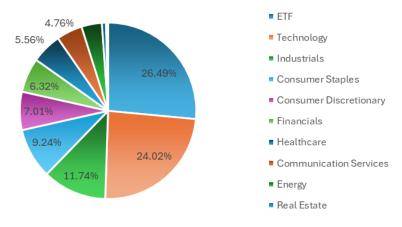




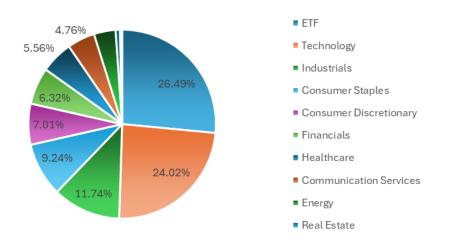
#### Effect on the Portfolio

	<b>Existing Portfolio</b>	New Portfolio
Beta	1.02	1.03
Sharpe	.89	.895
Alpha	14%	.02%
Standard Deviation	17.28%	17.7%
<b>Expected Return</b>	13.40%	14%

#### **Old Portfolio**



#### **New Portfolio**







#### Recap

Idea – Invest in high R&D, low dividend yield companies to reflect reinvesting in the company to promote profitability within the tech sector

Strategy – Using R&D and Dividend Yield factors to find companies focused on expanding growth

Historical Performance – Total return **3yr: 149.54%, 10yr: 724.58%** (CAGR: 18.26)

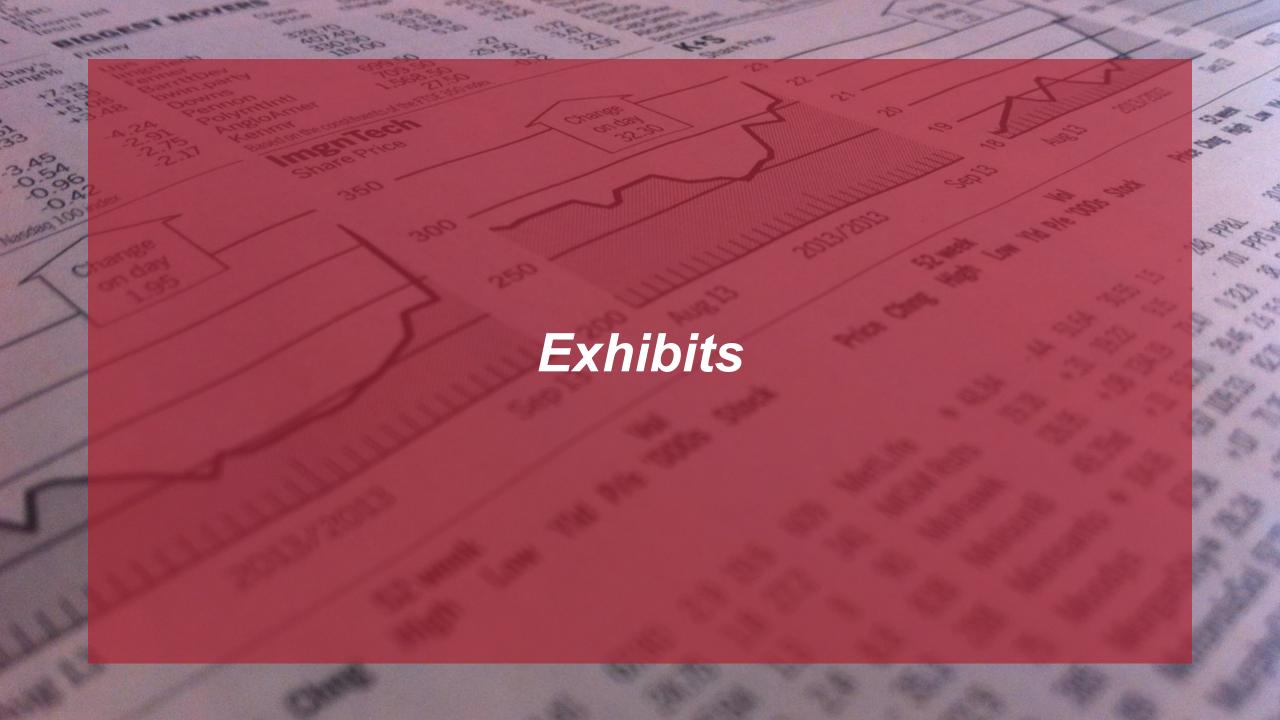
Recommendation – Buy \$48k, In School Fund, Sell NVDA

What to Sell – Sell NVDA due to over allocation in position

Effect on Portfolio – Reallocation within the tech sector, diversification, lower Beta,







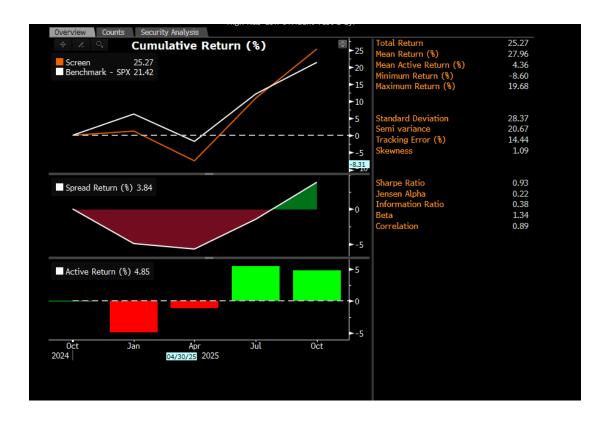
#### 10yr Performance

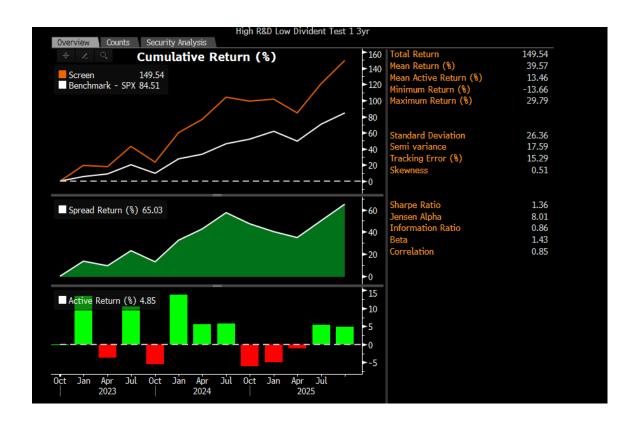






## 1yr & 3yr Performance



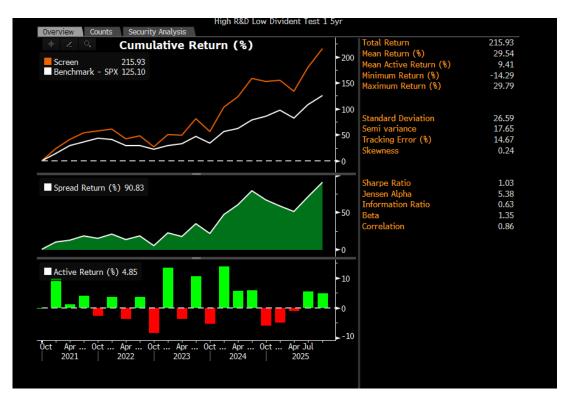




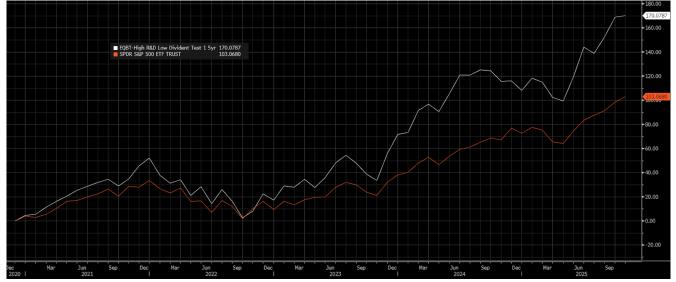


#### **5yr Performance**

#### **Quarterly Rebalancing**



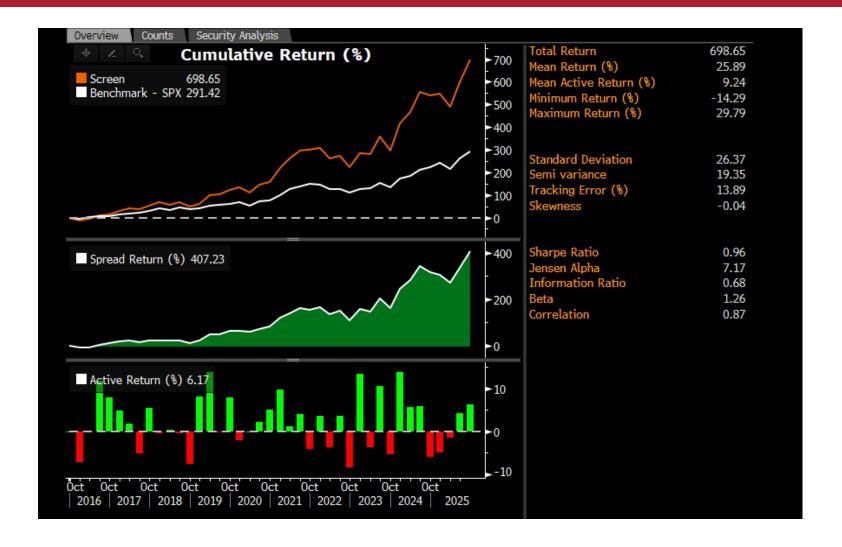
#### **Quarterly Rebalancing, Monthly Returns**







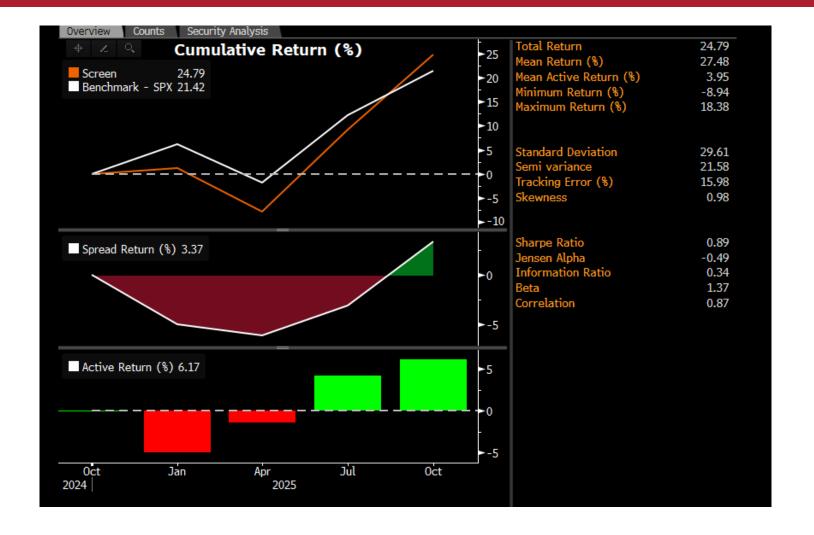
#### 10yr Performance, excluding mega caps







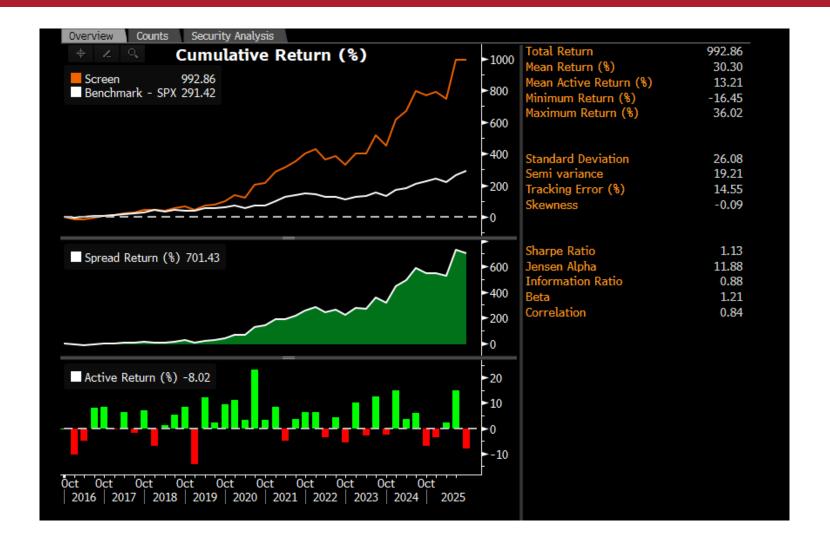
#### 1yr Performance, excluding mega caps







#### 10yr Performance, weighted by market cap







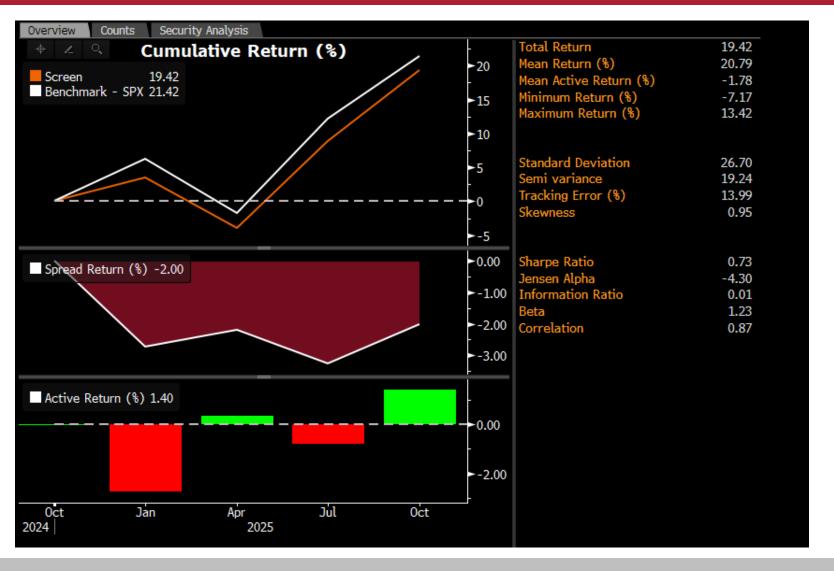
# 10yr Performance, weighted by market cap, excluding mega caps







# 1yr Performance, weighted by market cap, excluding mega caps







# 3yr Performance, weighted by market cap, excluding mega caps





