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March 16, 2022

# Ned Davis Research

# NDR 2022 Thematic Investment Opportunities

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# 2022 Thematic Investment Opportunities

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Senior Portfolio Strategist

March 2022



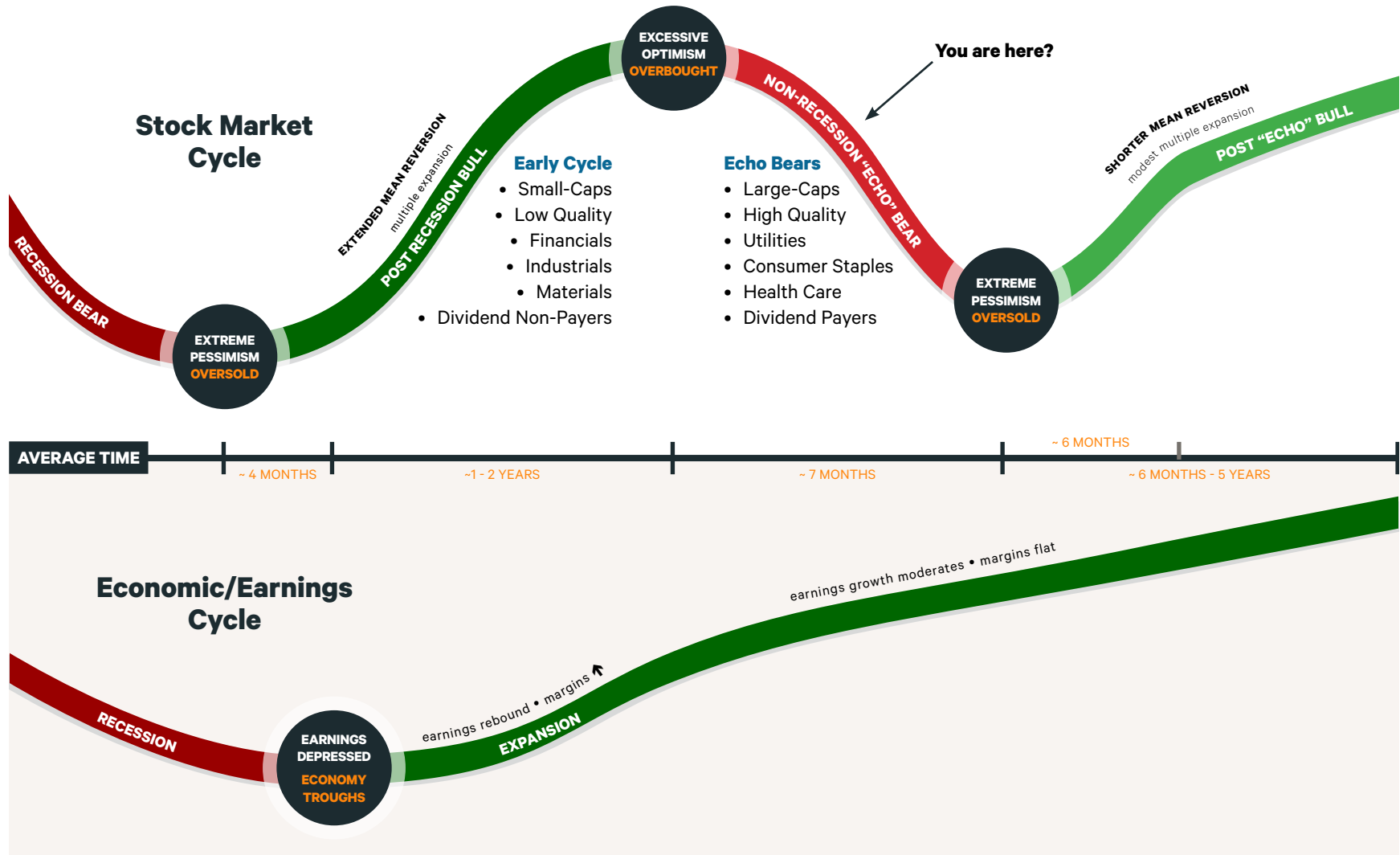
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# Overview

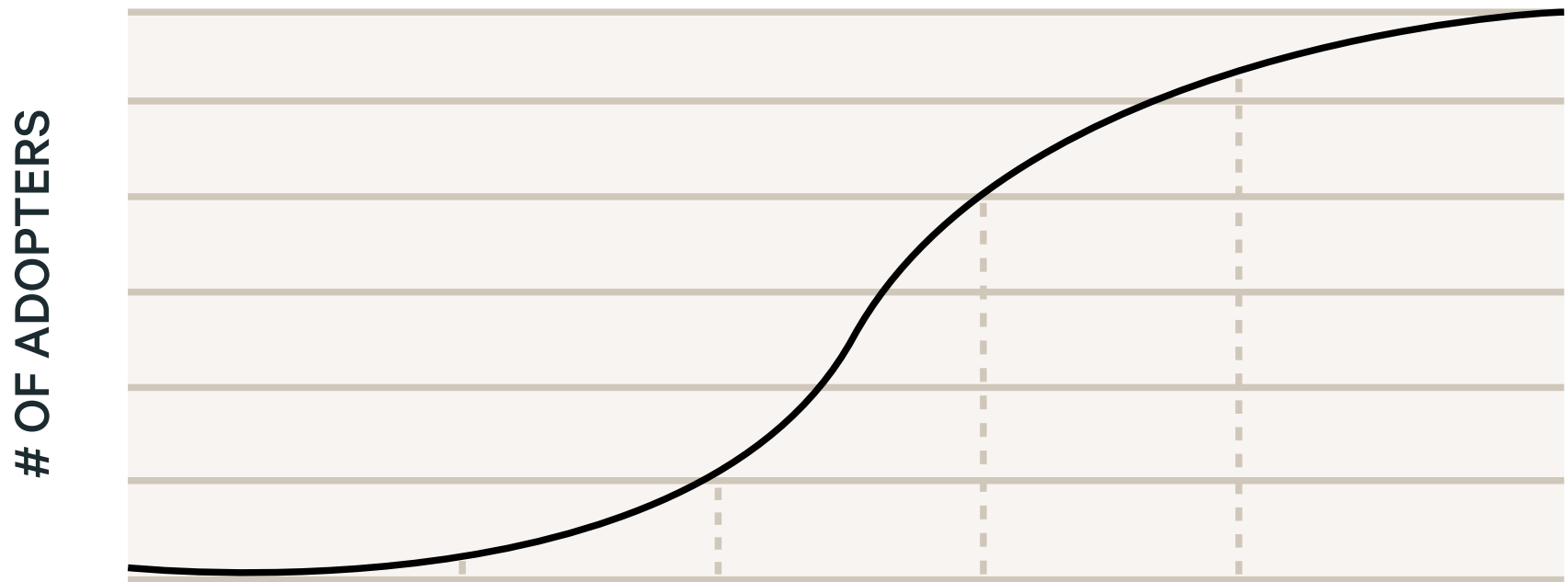
Thematic Backdrop	1-6
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# Stock market cycle.

## Stock Market and Economic Cycles

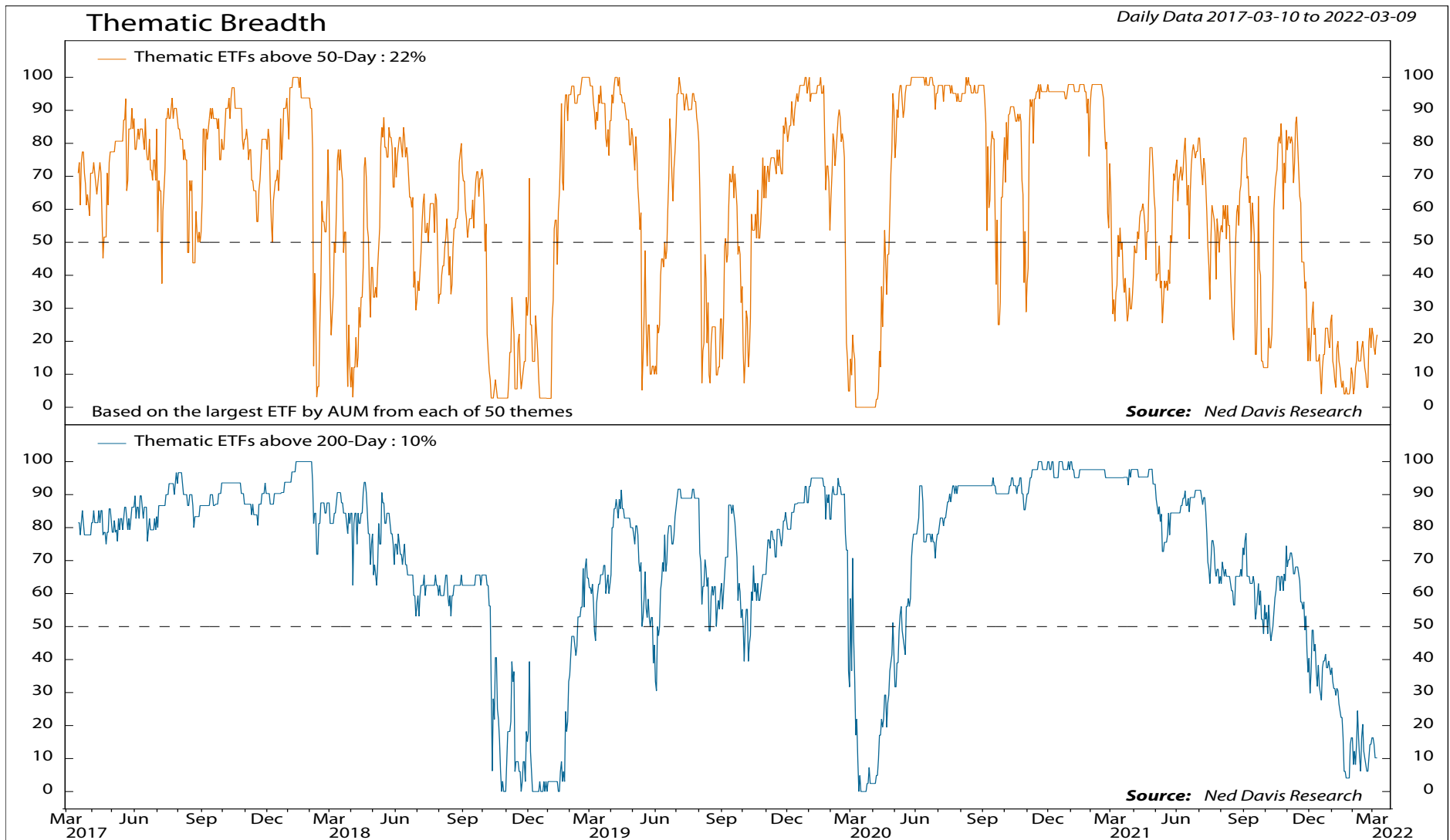


Thematic investors are often early investors.



Stage of Adoption	Innovators	Early Adopters	Early Majority	Late Majority	Laggards
Investment Vehicle	Venture Capital	Thematic Funds			Industry Funds

# Risk-off has been brutal for thematic investors.

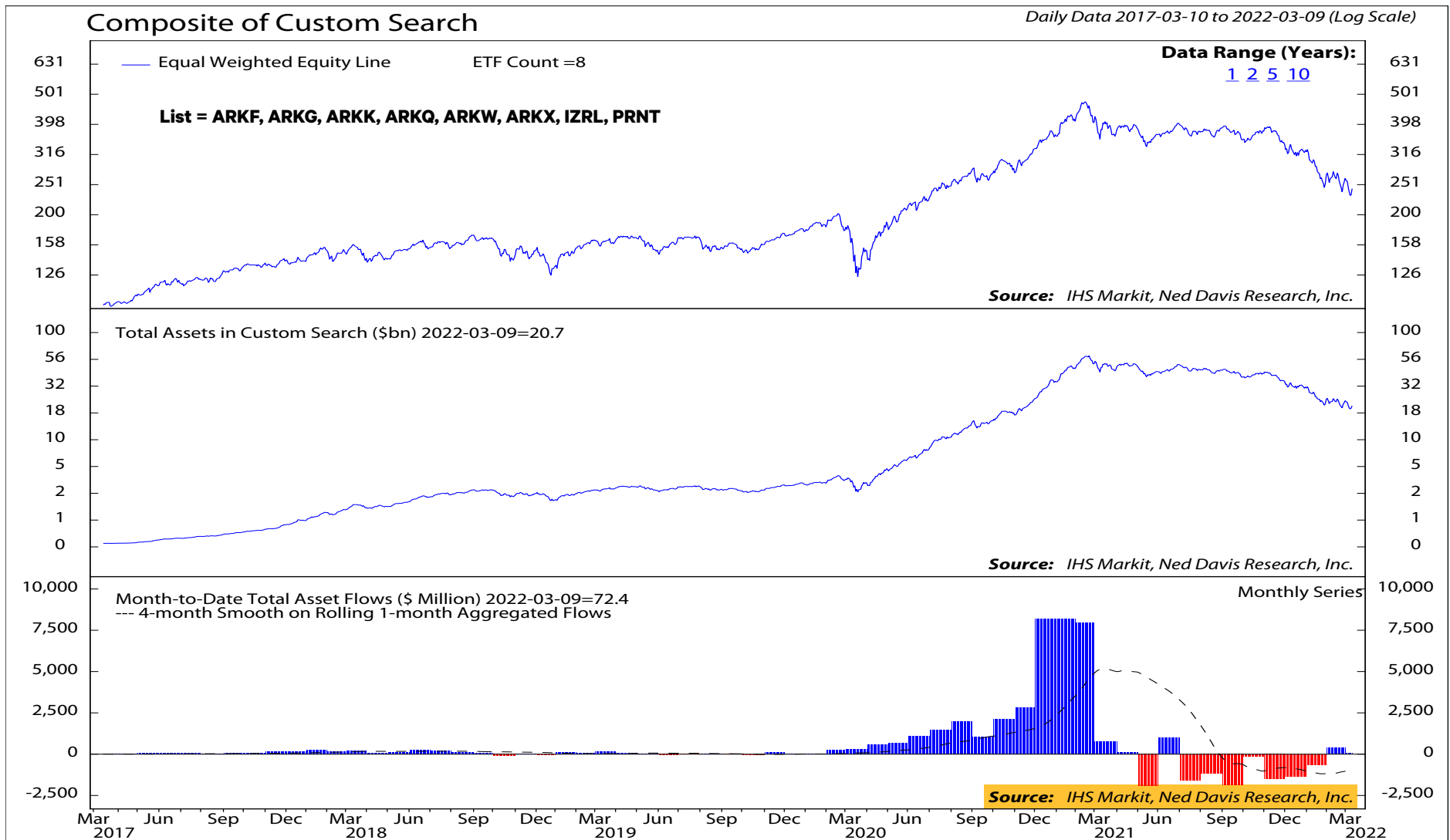


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# ARK funds have lost nearly \$20 billion.



ETF\_7.RPT\_Custom Search

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Twenty of fifty themes have declined 35% or more.

<b>Themes with the largest corrections (2021-2022)</b>			
<b>Theme</b>	<b>2021 - 2022 Correction</b>	<b>Return since 2022 low</b>	<b>100 Day Volatility</b>
Cannabis	-83.5	4.1	2.8
Education	-66.1	4.1	1.4
Gig Economy	-60.0	6.1	2.3
Hydrogen	-55.1	33.4	2.6
Ecommerce	-53.3	4.3	1.9
Solar	-51.0	28.6	2.3
Social Media	-50.1	4.9	1.7
FinTech	-48.1	7.2	2.0
China Thematic	-47.6	3.6	1.7
Blockchain	-45.9	8.8	2.4
3D Printing	-45.4	4.9	1.6
Sport Betting	-45.2	7.0	1.8
Clean Energy	-43.6	19.0	1.8
Big Data	-41.8	5.2	2.0
Travel	-41.4	9.7	1.8
Genomics	-39.3	3.4	1.6
Mobile Payments	-39.2	6.0	1.6
Uranium	-37.1	34.5	2.7
Metaverse	-36.9	5.0	1.9
Cloud	-35.6	4.8	1.8
S&P 500	-13.0	2.6	0.9

% returns as of 03/09/2022.

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# Fed tightening and war have contributed to risk-off.

## NDR Thematic Opportunities Landscape

### New Technology

#### Devices

##### Mobility

- Autonomous Vehicles
- Electric Vehicles
- 5G
  - Network Infrastructure
  - Semiconductors
- Internet of Things (IoT)

##### Robotics

- Robotic Automation

#### Software

##### Cloud

- Cybersecurity
- Data organization/retrieval
- Data analytics

##### Interactive Media

- Video Games
- Social Media
- Virtual Reality
- Augmented Reality

#### Services

##### Cloud

- Data Storage
- Computing
- Platform Services

##### FinTech

- Mobile Payments
- Lending
- Blockchain

##### Space

- Satellite Communications
- Tourism

### Demographics

#### Gen-Z & Millennials

##### Food & Beverage

- Plant-based food
- Carbonated alcoholic

##### Leisure

- Cannabis / Sports Betting
- Pets

#### Millennials & Gen-X

##### Financial Services

- ESG Investing
- Retirement Planning

##### Durables

- 1<sup>st</sup>-time Homebuyers
- New Cars

#### Gen-X & Baby Boomers

##### Healthcare

- Longevity
- Telemedicine

### Global Shock

#### Environmental

##### Climate Change

- Solar
- Wind
- Electric Vehicles
- Battery / Energy Storage

##### Natural Disasters

- Hurricane
- Flooding

#### Pandemic/Disease

##### COVID Leaders

- Technology Titans
- Work from Home
- COVID Cure

##### COVID Laggards

- Travel Retail
- Utilities REITs
- Banks Energy

#### All Other

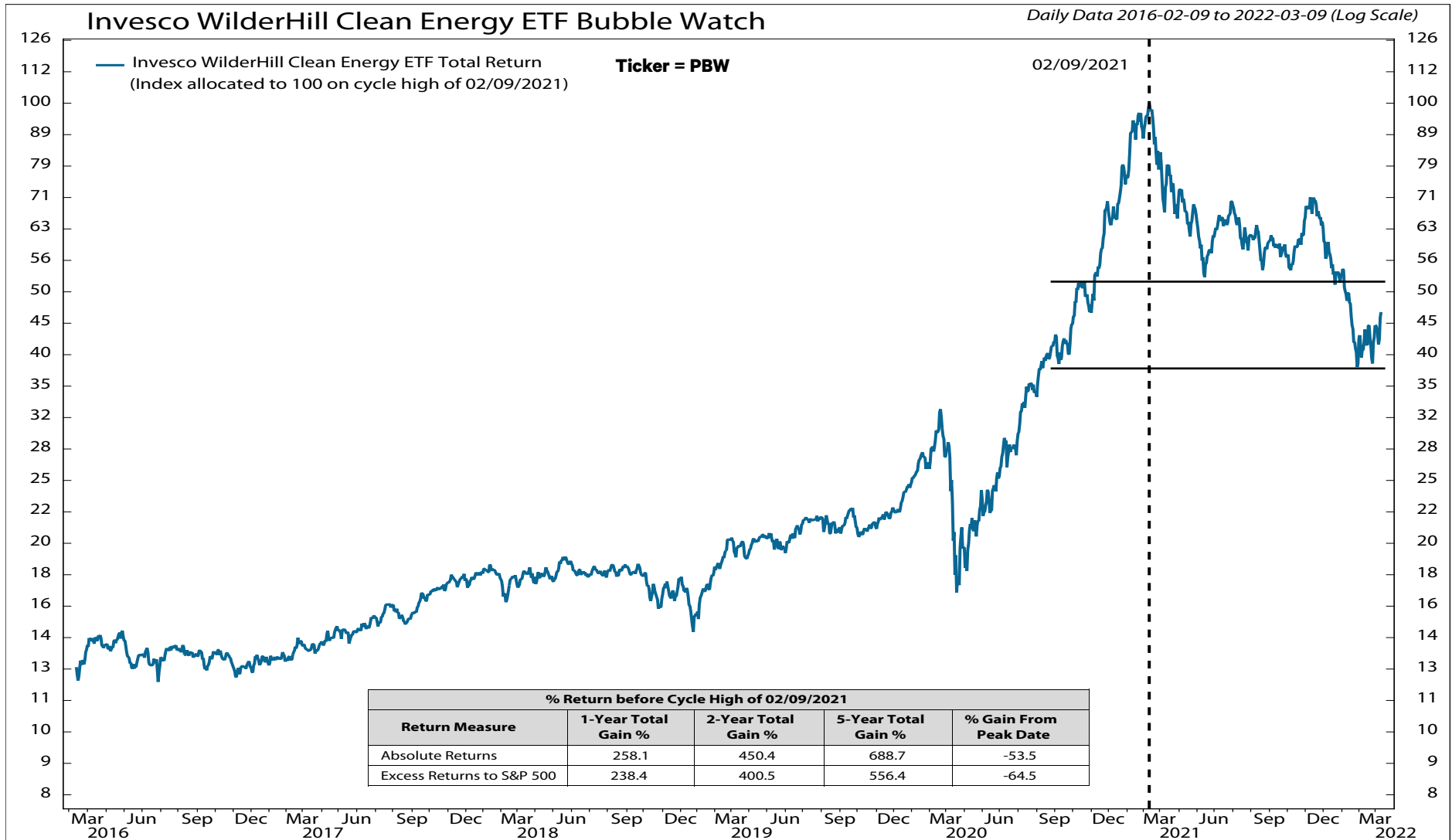
##### Infrastructure

- Government
- Private

##### War

- Trade
- Defense

# Clean Energy key question: burst bubble or buying opportunity?



TO\_BUBBLE.RPT

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# Clean Energy lost momentum with BBB part II.

<b>Bipartisan Infrastructure (\$1.2T)</b>	<b>Human Infrastructure (\$3.5T)</b>	<b>Paying for Human Infrastructure</b>
Environmental (\$21 billion)	Care for disabled and elderly	(from Dems on House Ways & Means)
Utilities (\$240 billion)	Subsidized child care	Top capital gains rate from 20% to 25%
Water	Free community college	Top corporate tax rate from 21% to 26.5%
Electric	Paid family leave	3% surtax on individuals with AGI > \$5 mil.
Internet	Extended child tax credits	Cut some estate tax discounts
Resiliency	<b>New clean energy standards</b>	Crypto wash sale and disguised sale rules
Transportation (\$285 billion)	<b>Wind and solar incentives</b>	Estimated \$900 billion from corp tax
Roads/bridges		Estimated \$1 trillion from individ tax
Ports/waterways/airports		
Passenger & Freight Rail		
<b>Electric Vehicles/Charging Stations</b>		

Source: Bloomberg, New York Times.

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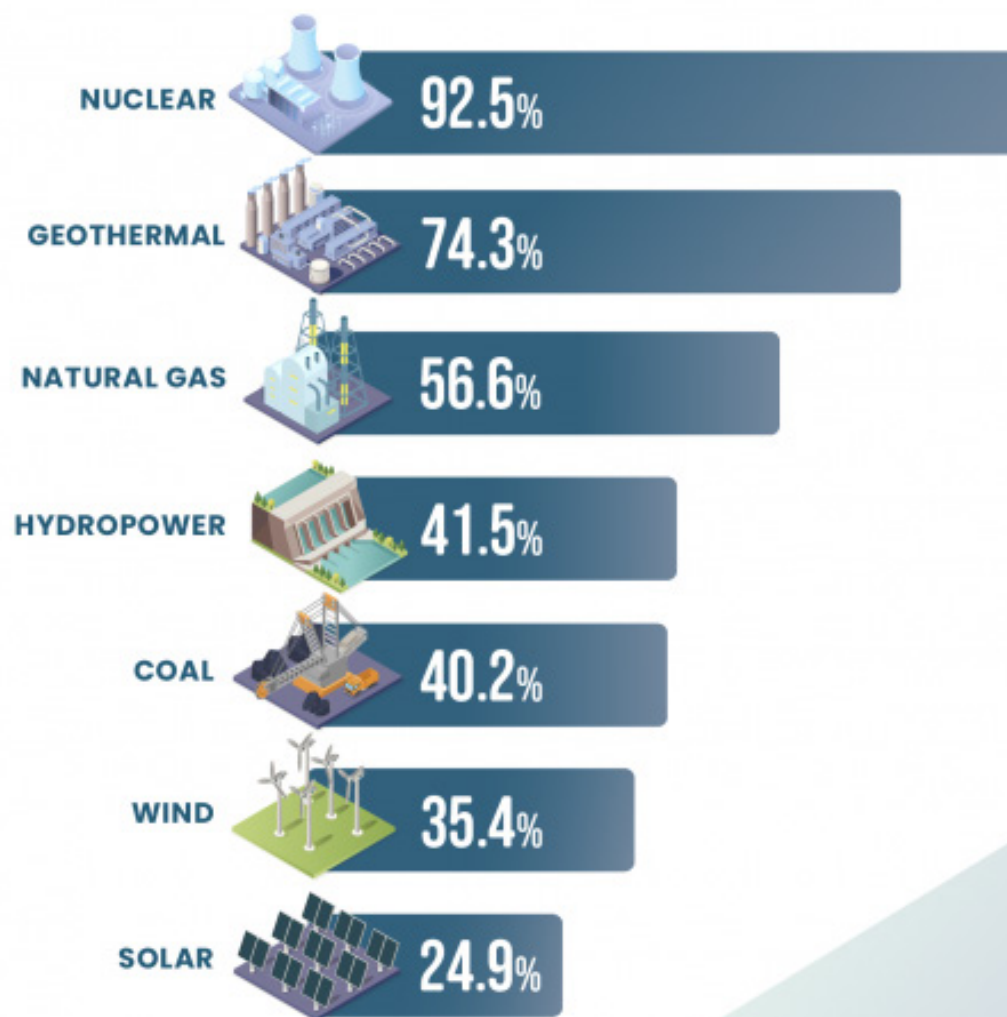
Nuclear power likely to be part of the low carbon solution.

## Capacity Factor by Energy Source in 2020

Source: U.S. Energy Information Administration



U.S. DEPARTMENT OF **ENERGY** | Office of NUCLEAR ENERGY



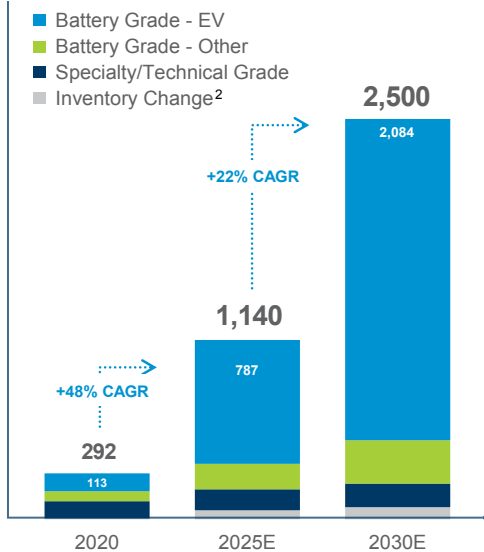
Source: U.S. Department of Energy, Office of Nuclear Energy, <https://www.energy.gov>

EVs also offer quick solution to reduce oil usage, emissions.

## Lithium Demand Driven by EV Penetration and Battery Size

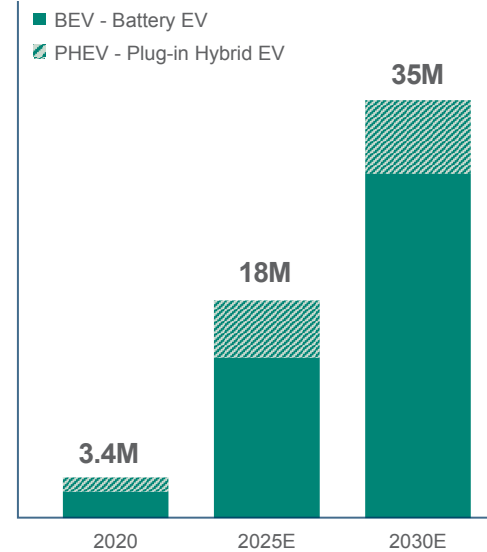
### Lithium Demand by Application<sup>1</sup>

(ktpa LCE)



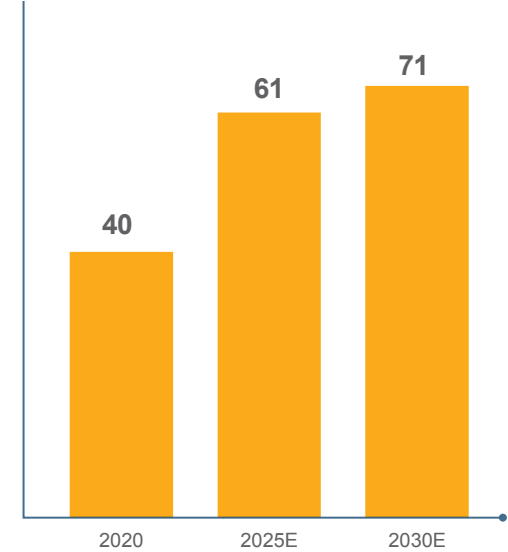
### EV Production<sup>1</sup>

(Vehicle Units)



### Battery Size (EV Average)<sup>1</sup>

(kWh per EV)



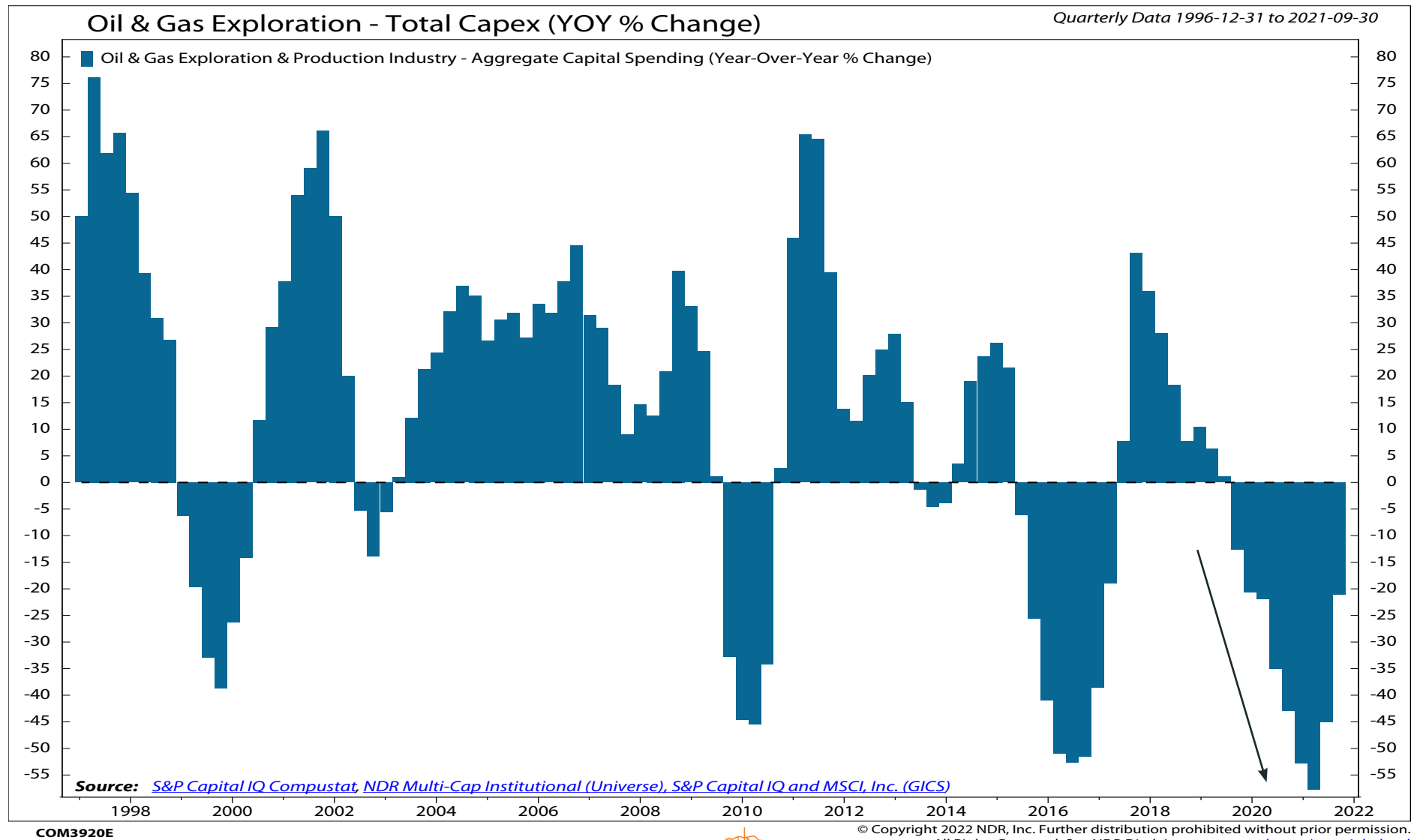
**Strong EV demand growth is expected to continue through the decade**

MAKING THE WORLD SAFE AND SUSTAINABLE

<sup>1</sup> Albemarle analysis, IHS Markit, Roskill, B3, CRU, BNEF, BMI. **Lithium Intensity of Energy Storage Demand:** 0.83, 0.83, and 0.86 kg LCE/kWh in 2020, 2025, and 2030, respectively; calculated from demand model output of total lithium demand (total real consumption and YOY inventory change), which accounts for lithium consumption of different technologies and applications. <sup>2</sup>Inventory change assumes an average three-months of available inventory.

ALBEMARLE®

# Expect oil prices to remain high after two years of underinvestment...



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...especially if new demand from Europe.

<b>Russia Exports</b>	<b>\$ billions</b>	<b>Share of world exports (%)</b>	<b>Ranking in world exports</b>
Crude Oil	72.6	11.9	2
Petroleum ex-crude	45.4	9.5	3
Coal	12.4	15	3
Natural Gas	7.8	3.4	7
Distillates	1.7	8.3	3
Electricity	0.5	1.7	17
Coke	0.5	9.2	5
All other	1.1		
Petroleum and Energy	141.9	9.5	3
2020 Exports		Source: Trade Map, International Trade Centre, <a href="https://www.trademap.org">https://www.trademap.org</a> .	
Ned Davis Research		T_TO_OR202203101.4	



# War has put Europe and the U.S. on the defensive...

<b>US Defense Group</b>			
<b>Ticker</b>	<b>Name</b>	<b>Types of products</b>	<b>YTD RS</b>
LMT	Lockheed Martin	Aircraft, missiles, drones	45.1
LHX	L3Harris Technologies	Military aviation, space defense	41.0
MANT	ManTech International	Defense IT, mission operations	35.2
NOC	Northrop Grumman	Aircraft, combat vehicles, space	33.3
LDOS	Leidos Holdings	Defense IT, space, drones	32.0
GD	General Dynamics	Naval, defense IT, combat vehicles	29.6
RTX	Raytheon Technologies	Electronics, missiles	26.6
CACI	CACI International	Defense IT, national security intel	24.1
BA	Boeing	Aircraft, missiles, space	-0.9
<b>Cyber Security Software Group</b>			
<b>Ticker</b>	<b>Name</b>	<b>Types of products</b>	<b>YTD RS</b>
MNDT	Mandiant Inc	Incident response	44.3
CHKP	Check Point	Firewalls, mobile security	34.1
PANW	Palo Alto Networks	Firewalls, cloud security	8.3
SAIL	SailPoint	Employee permissions	5.0
FTNT	Fortinet	Firewalls, antivirus software	-11.5
CRWD	CrowdStrike	Antivirus, endpoint detection	-12.1
OKTA	Okta Inc	Authentication, authorization	-18.3
ZS	Zscaler Inc	Internet traffic threats	-29.0

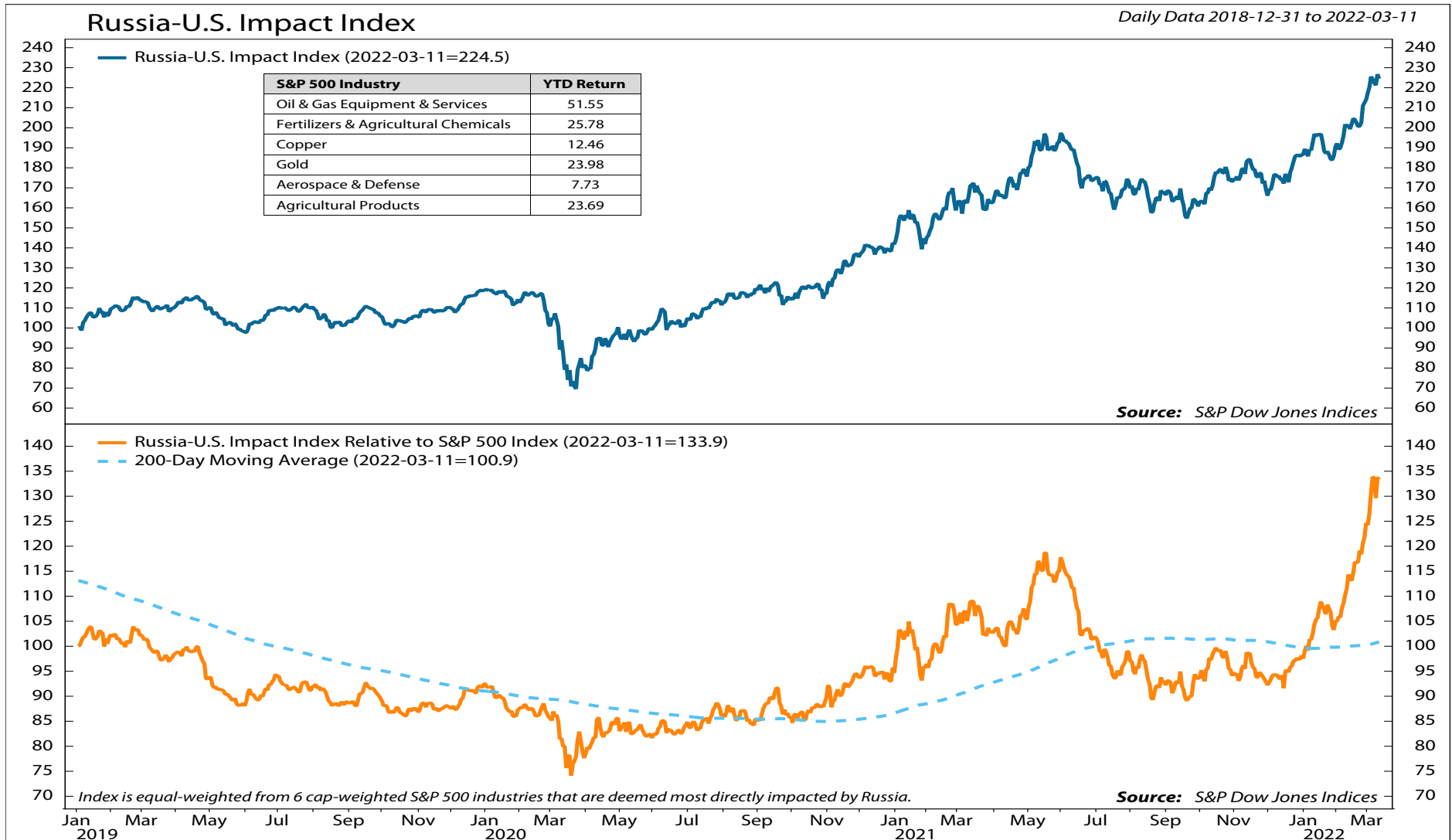
YTD RS is ETF / ACWI % price return as of 3/8/2022.

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...and U.S. investors have reacted.

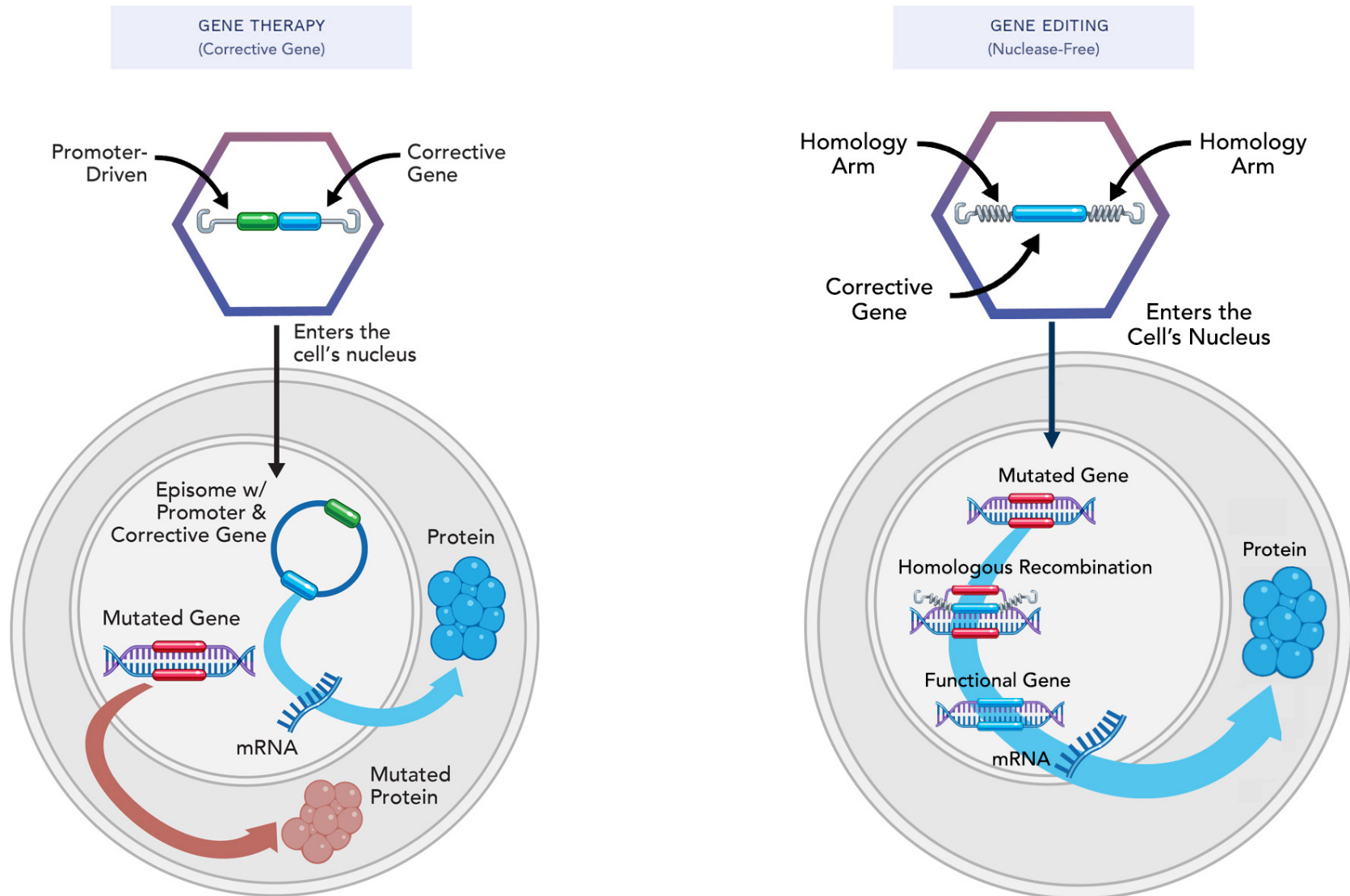


TO ENERGY 511



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# Gene therapy/editing is showing great promise.



Homology Medicines, Inc.

## Potential opportunities from a growing list of companies.

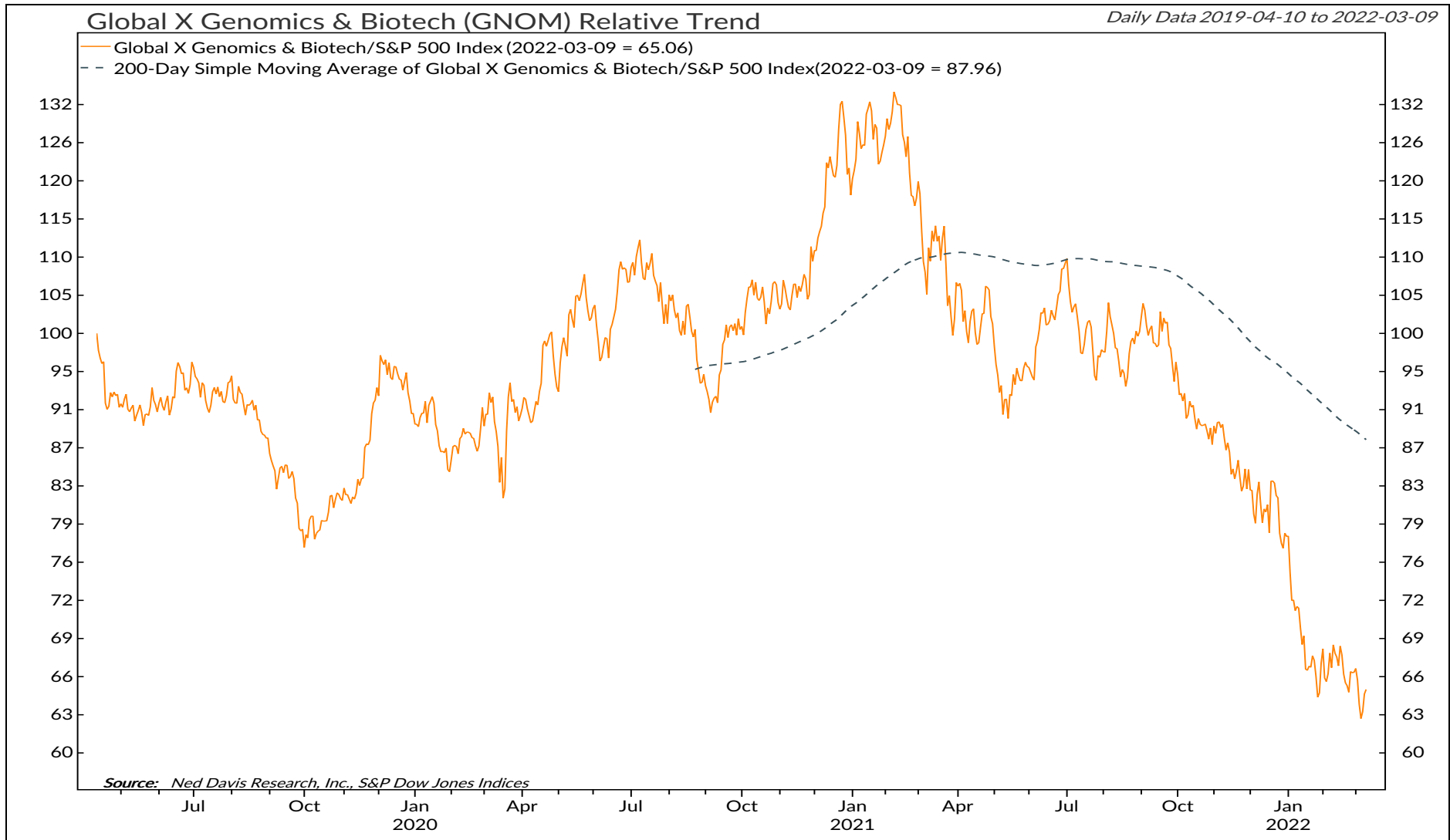
<b>Ticker</b>	<b>Name</b>	<b>Primary gene therapy/edit tools*</b>	<b>Targeted Diseases*</b>
BEAM	Beam Therapeutics	Modified CRSPR + base protien	Sickle cell, luekemia, stargardt, antitrypsin deficiency
BLUE	Bluebird Bio	megaTAL (homing endonucleases+TALENs)	Cancer, sickle cell, beta thalassemia, ALD
CLLS	Cellectis	TALEN	Cancer - lukemia, lymphoma
CRSP	CRISPR Therapeutics	CRSPR-Cas9/12	Type I diabetes, GSD, DMD, cystic fibrosis
DTIL	Precision Biosciences	ARCUS	DMD, Hepatitis B, PH1
EDIT	Editas	TALEN	Usher syndrome, sickle cell, beta thalassemia, RP4
FIXX	Homology Medicines	Homologous Recombination	PKU, MLD, PNH, hunter syndrome
MGTX	MeiraGTx	AAV	Parkinson's, ALS, rare eye diseases
NTLA	Intellia Therapeutics	CRSPR/Cas9	hemophilia, lukemia, sickle cell, angioedema
PASG	Passage Bio	AAV	Alzheimers, frontotemporal dementia, krabbe
PSTX	Poseida Therapeutics	modified CRSPR + AAV	Cancer - prostate, hemophilia, multiple myeloma
QURE	Uniqore	AAV	Fabry disease, hemophilia B, huntington's, parkinson's, alzheimer's
RGNX	REGENXBIO	AAV	DMD, MPS I and II
SGMO	Sangamo Therapeutics	Zinc Finger	Fabry disease, sickle cell, beta thalassemia, ALD, MS, huntingtons
SRPT	Sarepta Therapeutics	CRSPR/Cas9	DMD, MS
VYGR	Voyager Therapeutics	AAV	Huntington's, parkinson's, ALS, spinal muscular atrophy

\*For illustrative purposes - not a comprehensive list of tools and targeted diseases. DMD is Duchenne muscular dystrophy. All companies listed above except BEAM, MGTX, PASG, and PSTX are held in GNOM.

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# Risk appetite for unprofitable companies is very low.



Customized version of TO\_TREND.RPT

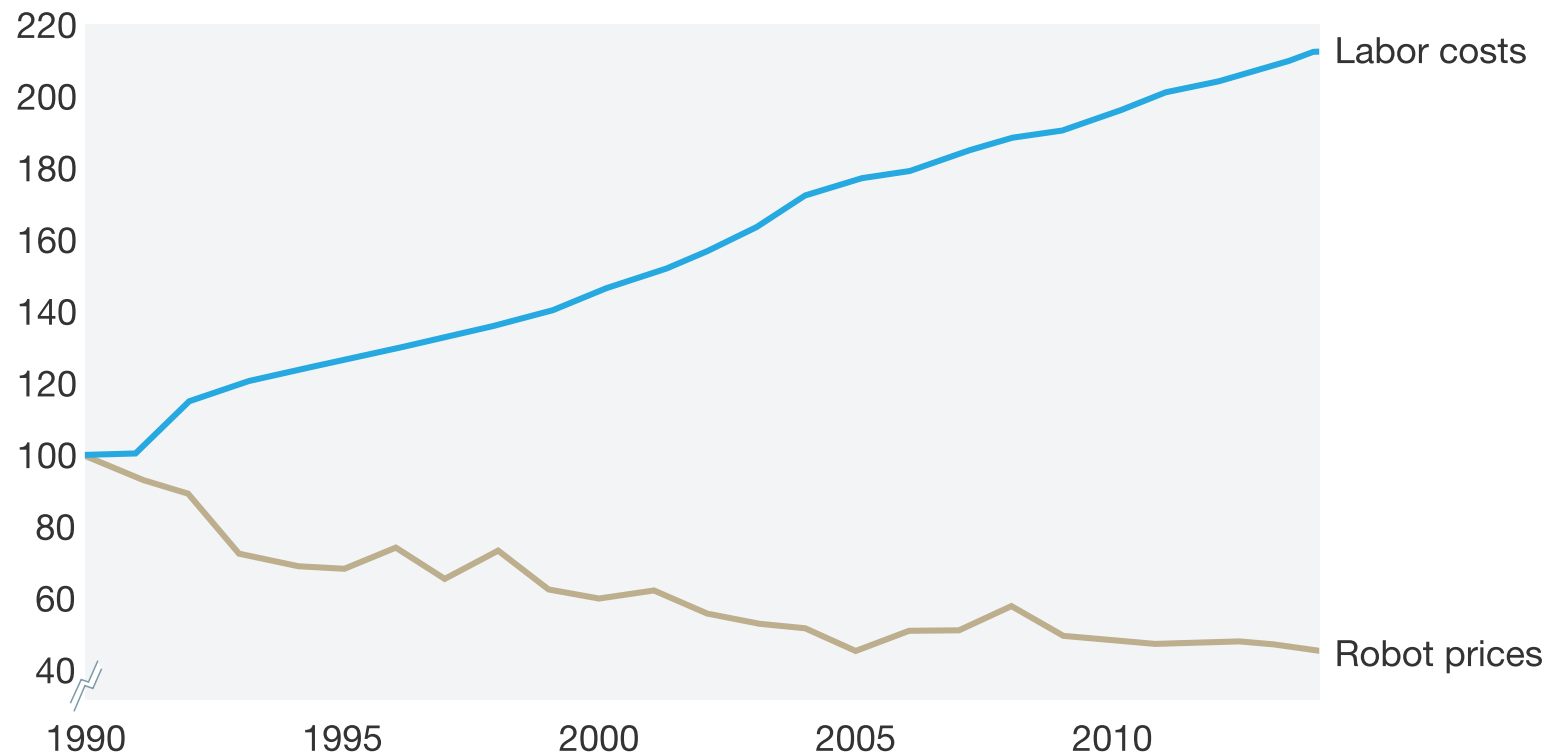


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# Robots are only getting more affordable relative to labor.

## Cost of automation

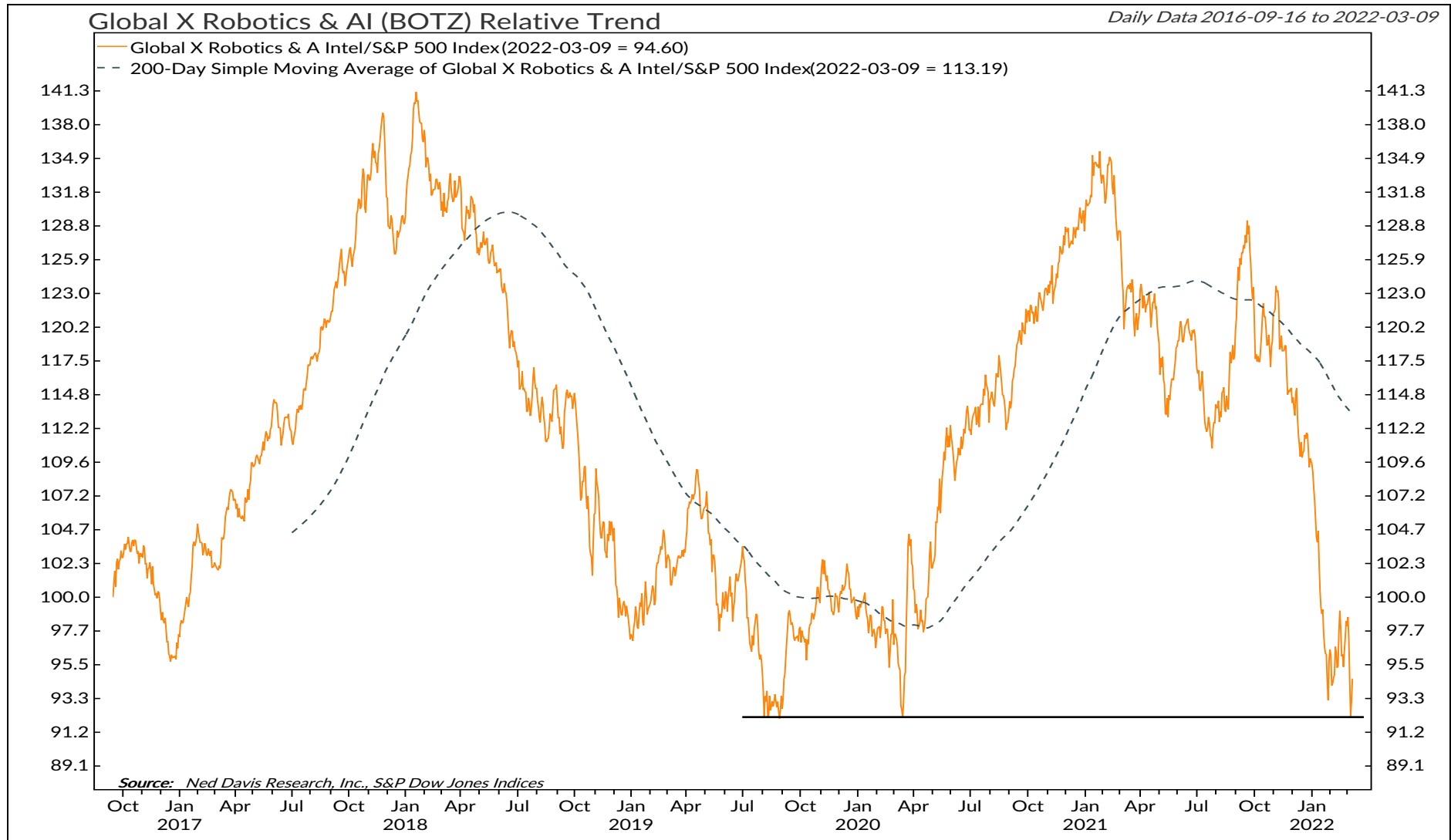
Index of average robot prices and labor compensation in manufacturing in United States, 1990 = 100%



Source: Economist Intelligence Unit; IMB; Institut für Arbeitsmarkt- und Berufsforschung; International Robot Federation; US Social Security data; McKinsey analysis

McKinsey&Company

# BOTZ relative strength now back to 2019 levels.



Customized version of TO\_TREND.RPT

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# Themes we are watching closely.

## Clean Energy

- Global Clean Energy
- Nuclear Energy
- Batteries

## Infrastructure and Defense

- Oil Exploration & Production
- Infrastructure
- Defense
- Cybersecurity

## On our Radar

- Genomics
- Robotics



# Bottom Line

- Waiting for risk appetite to return
- For now industrials are working:  
Oil and Nuclear Energy, Defense, Infrastructure
- What could work when risk-on returns:  
Clean Energy, EVs/Batteries, Robotics, Genomics

For global asset allocation, NDR recommends overweight allocation to cash, marketweight allocation to stocks and underweight allocation to bonds. Equities remain in the secular bull market started in 2009. But we have been expecting increased volatility and recognize the possibility of a cyclical bear market.

## Equity Allocation

**U.S.** | Our intermediate-term outlook for U.S. equities is negative. On an asset allocation basis, we are overweight cash and underweight stocks and bonds. We favor large-caps over small-caps and are neutral on Growth versus Value.

**INTERNATIONAL** | We are overweight Europe ex. U.K. and Canada, underweight Pacific ex. Japan and the U.S., and marketweight on all other regions.

## Macro

**ECONOMY** | The global economy is poised for slower, but still strong growth in 2022, as high savings and wealth, pent-up demand, and the broadening of vaccines globally support growth. The COVID pandemic, supply chain issues, elevated inflation, and tighter global monetary policy present risks to the outlook.

**FIXED INCOME** | We are 85% of benchmark duration and expect the yield curve to flatten. We are overweight CMBS, ABS, and HY corporates, and marketweight everything else.

**GOLD** | Long-term uptrend intact. We are bullish.

**DOLLAR** | Our long-term technical composite is positive. We are neutral, also recognizing real interest rate differentials.

## Economic Summary

March 14, 2022

Near term activity: ● Accelerating ● Neutral ● Decelerating



Global Economy  
(4.3%)



U.S. Economy  
(3.5%-4.0%)



U.S. Inflation  
(3.0%-3.5%)

Economic gauges reflect changes in near-term economic activity. Numbers in parenthesis refer to NDR 2022 forecasts.

## Global Asset Allocation

● Overweight ● Marketweight ● Underweight

- Cash (15%)
- Stocks (55%)
- Bonds (30%)

Benchmark: Stocks (55%), Bonds (35%), Cash (10%)

### Equities — Regional Relative Allocation

- Europe ex. U.K. (16%) | Canada (6%)
- Japan (6%) | Emerging Markets (13%) | U.K. (4%)
- U.S. (54%) | Pacific ex. Japan (1%)

Benchmark – U.S. (59.5%), Europe ex. U.K. (12.7%), Emerging Markets (12.2%), Japan (6.0%), U.K. (3.7%), Pacific ex. Japan (2.9%), Canada (2.9%)

### Global Bond Allocation

- Europe (30%) | Japan (20%)
- U.K. (5%)
- U.S. (45%)

Benchmark: U.S. (52%), Europe (27%), Japan (15%), U.K. (6%)

## U.S. Allocation

- Cash (20%) | Large-Cap
- Growth | Value | Mid-Cap
- Stocks (50%) | Bonds (30%) | Small-Cap

Benchmark: Stocks (55%), Bonds (35%), Cash (10%)

### Sectors

- Energy (5%) | Materials (4%) | Consumer Staples (9%) | Health Care (16%) | Utilities (4%)
- Consumer Discretionary (10%) | Communication Services (8%) | Technology (23%)

Benchmark: Technology (27.4%), Health Care (12.9%), Financials (10.9%), Communication Services (10.9%), Consumer Discretionary (13.1%), Consumer Staples (6.4%), Industrials (8.2%), Energy (2.8%), Utilities (2.4%), Real Estate (2.5%), Materials (2.5%)

### U.S. Bonds — 85% of Benchmark Duration



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# Pat Tschosik, CFA, CMT

## Senior Portfolio Strategist

**Pat Tschosik, CFA, CMT**, is Ned Davis Research's Senior Portfolio Strategist. Pat leads Thematic Opportunities, NDR's most actionable investment research product. Pat authors **Theme Initiation**, **Thematic Focus**, and **On the Radar** publications, which provide recommendations and insights on unique, emerging macro-driven trends. Pat also provides investment recommendations based on NDR strategist high-conviction overweight recommendations.

Prior to leading Thematic Opportunities, Pat served as NDR's U.S. Sector Strategist for four years, and Consumer Strategist for 10 years. Pat began his investment career covering Consumer Staples for Banc of America Capital Management in St. Louis, MO. Subsequently, Pat worked as a Senior Equity Analyst at RCM Capital Management in San Francisco, CA, covering Consumer Discretionary and Consumer Staples industries. He joined Ned Davis Research in 2006.

Pat has been featured as a guest on **CNBC** and **Bloomberg** television in addition to being quoted by **The Wall Street Journal**. Pat earned his Master of Business Administration from the University of Chicago Booth School of Business and has a Bachelor of Science in Computer Science from Illinois State University. Pat is a CFA charterholder and is a member of the CFA Institute. He is also a Chartered Market Technician and a member of the Market Technicians Association.



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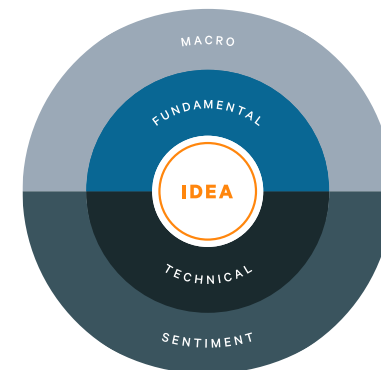
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## See the signals.™

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