

OCTOBER 2024

Thematic quarterly

Trends in the global equity markets
through a thematic lens

The MarketVector Quarterly Thematic Update provides a bird's eye view on trends in the global equity markets through a thematic lens. We've organized our family of thematic indexes into ten meta themes so investors can get a sense of the performance of which megatrends are leading or lagging, while also being able to discover the leading indexes and individual stocks within those broader themes.



CLEAN ENERGY



NEXTGEN HARDWARE & COMMUNICATIONS



CONSUMER TRENDS



NEXTGEN SOFTWARE



FINANCIALS 2.0



REGIONAL TECHNOLOGY



HEALTHCARE INNOVATION



REITs 2.0



MATERIALS

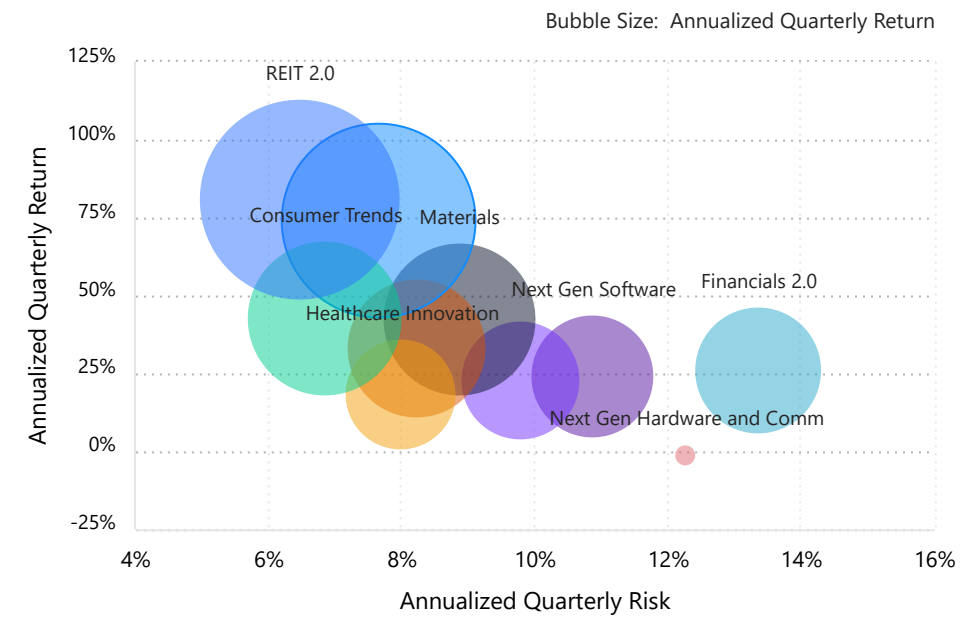


THEMATIC INDUSTRIALS & INFRASTRUCTURE

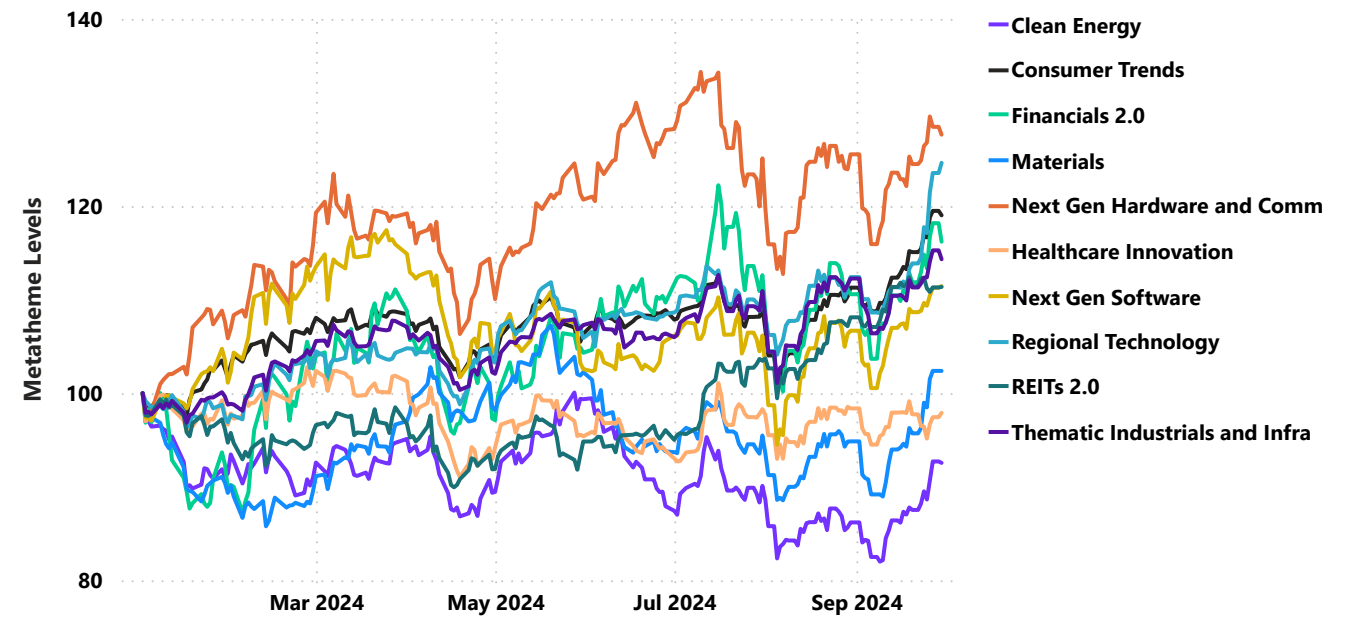
MARKETVECTOR Q3 NEWS AND INSIGHTS

- [India Stack](#)
- [U.S. Space Force Expands Satellite Capabilities](#)
- [Hidden GEMs: Georgia](#)
- [How Fabless Semiconductors are Leading Technology Innovation](#)
- [MarketVector Expands Leadership in the Semiconductor Sector, Licensing Innovative Fabless Semiconductor Index to VanEck](#)
- [How Do Interest Rates Influence Gold?](#)
- [Hidden GEMs: Guyana](#)
- [Summer Heat v/s Market Heat](#)
- [Launch of MVDEFA](#)
- [The Trump Trade](#)
- [MRO Networks and Defense Readiness](#)
- [Quarterly Israel Equity Review and Outlook Q3 2024](#)
- [Quarterly Thematic Chartpack Q2 2024](#)
- [Equity Indexing Overview Q2 2024](#)
- [Corporate Overview Q2 2024](#)
- [MarketVector Hits 50bn!](#)

Risk - Return Snapshot [Sep 2021-Sep 2024]



YTD Return [2024]



Metatheme Returns

Metatheme	QTD	YTD	LTM
Clean Energy	5.26%	-8.80%	-5.82%
Consumer Trends	9.30%	17.43%	31.71%
Financials 2.0	5.93%	13.36%	64.43%
Healthcare Innovation	4.29%	-1.98%	8.43%
Materials	9.17%	1.63%	4.18%
Next Gen Hardware and Comm	-0.39%	24.26%	45.67%
Next Gen Software	5.54%	8.97%	26.09%
Regional Tech	14.90%	22.46%	30.71%
REIT 2.0	15.93%	11.88%	28.84%
Thematic Industrials and Infra	7.46%	12.48%	26.94%

Top 10 Indexes by Quarterly Return

Index	Metatheme	Return
China Internet Software	Regional Tech	29.08%
US Listed Office and Commercial REITs	REIT 2.0	23.66%
Space Industry	Thematic Industrials and Infra	21.81%
Data Center and Logistics Real Estate	REIT 2.0	20.43%
Low Carbon Energy	Clean Energy	16.36%
Junior Gold Miners	Materials	15.73%
Online Gambling, Video Gaming, and eSports	Consumer Trends	14.49%
US Listed Durable REIT Dividend	REIT 2.0	13.87%
Asia Technology	Regional Tech	11.56%
Total Security	Thematic Industrials and Infra	10.12%

Bottom 10 Indexes by Quarterly Return

Index	Metatheme	Return
US Listed Semiconductor 25	Next Gen Hardware and Comm	-5.99%
Solar Energy	Clean Energy	-3.10%
US Listed Fabless Semiconductor	Next Gen Hardware and Comm	-2.31%
Robotics & 3D Printing	Thematic Industrials and Infra	-2.14%
Bionic Healthcare	Healthcare Innovation	-1.78%
Digital Assets Equity	Financials 2.0	-1.31%
Hydrogen Economy	Clean Energy	-0.81%
Machine Learning and Quantum Computing	Next Gen Hardware and Comm	-0.37%
Metaverse and e-Games	Consumer Trends	-0.20%
Robotics	Thematic Industrials and Infra	-0.15%

Clean Energy		Materials		REIT 2.0		Thematic Industrials and Infra			Consumer Trends		
Clean Energy -0.05%	Hydrogen Economy -0.81%	Agribusiness 7.13%	Clean-Tech Metals 5.52%	Data Center and Logistics Real Estate 20.43%	Top 10 US Residential Real Estate 16.39%	Autonomous Driving 1.27%	Circular Economy 6.61%	Defense Industry 12.30%	Future of Food 15.35%	Gaming 10.52%	
Low Carbon Energy 16.36%	Uranium and Nuclear Energy Infrastructure 9.37%	Global Natural Resources 4.54%	Junior Gold Miners 15.73%	US Listed Office and Commercial REITs 23.66%	US Listed Durable REIT Dividend 13.87%	Europe Infrastructure 9.15%	Robotics & 3D Printing -2.14%	Space Industry 21.81%	Metaverse and e-Games -0.20%	Hotels, Airlines, and Cruises 6.55%	Online Gambling, Video Gaming, and eSports 14.49%
Solar Energy -3.10%	Wind Energy 8.72%	Rare Earth/Strategic Metals 10.12%		US Mortgage REITs 7.11%	Quality REIT Index 14.08%	Robotics -0.15%	Total Security 10.12%	E-Commerce US Leaders 8.51%	Travel and Vacation 4.67%	Video Gaming & eSports 14.46%	
Financials 2.0		Next Gen Software		Regional Tech		Next Gen Hardware and Comm			Healthcare Innovation		
Digital Assets Equity -1.31%	E-Brokers and Digital Capital Markets 8.30%	Artificial Intelligence 1.48%	Big Data & AI -0.28%	Asia Technology 11.56%	China Internet Software 29.08%	Machine Learning and Quantum Computing -0.37%	Connective Technologies 3.85%		Bionic Healthcare -1.78%	Bioproduction Tech and Tools 6.94%	
Fintech 9.76%	Top 10 US Listed Alternative Asset Managers 15.79%	Digital Advertising 15.51%		Digital India 12.27%	Israel Global Technology 4.27%	US Listed Fabless Semiconductor -2.31%	US Listed Semiconductor 25 -5.99%	Future Healthcare 5.27%	Genomic Health Care 6.79%		

Quarterly Updates

Clean Energy metatheme finished Q3 2024 with a gain of 5.26%, reclaiming both the 50 and 200 SMA. Individual themes showed slight signs of recovery, although themes like Solar Energy and Hydrogen Economy continued to underperform.

MarketVector's broad Low Carbon Energy Index led the metatheme higher with a gain of 16.36% in Q3 and 7.64% over the last year. The index's relatively high weighting in the Utilities sector contributed nearly 50% of the index's overall gains. Global demand for electricity and power have been steadily rising and with accelerating adoption of themes like AI and EV charging infrastructure demand seems to be hitting an inflection point to the upside.

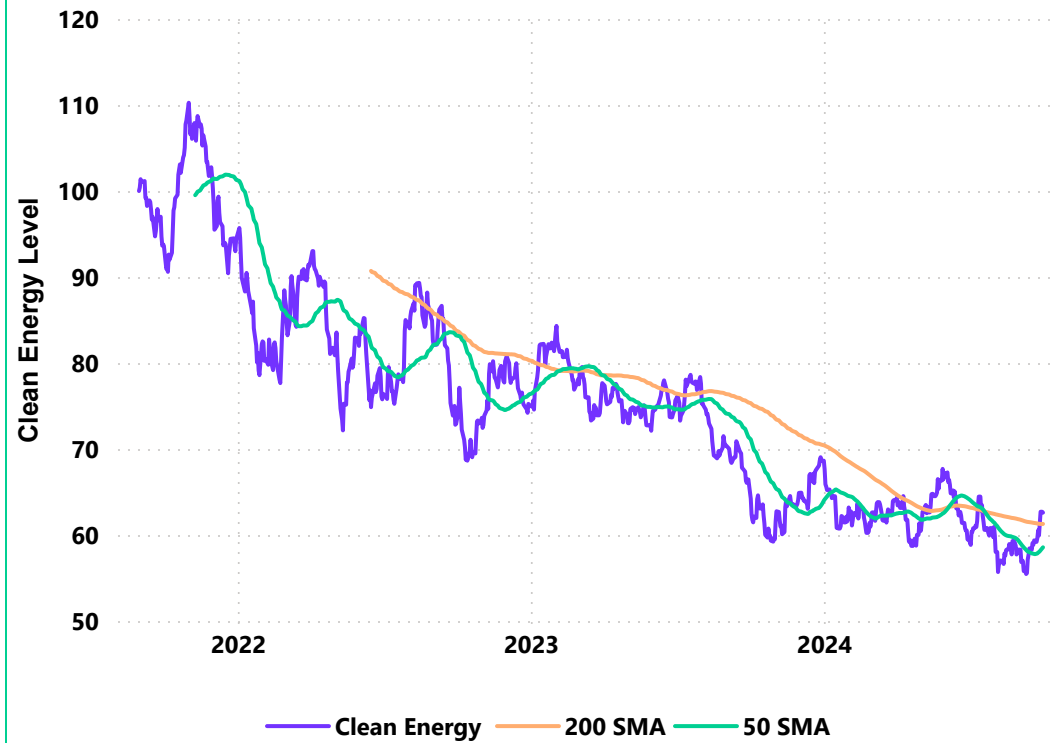
Global decarbonization efforts and energy security strategies continue to point to nuclear solutions. Notably, recent US federal investments have earmarked 804 megawatts of nuclear power as part of a broader \$7.3 billion clean energy package aimed at boosting power production in rural communities^[1]. Additionally, the European Union has been leveraging nuclear energy as a key component of its energy mix- nuclear remains the largest source of electricity in the EU.

In 2024, clean energy investments in the U.S. are expected to surpass \$300 billion, while Europe and China continue to lead with \$370 billion and nearly \$680 billion, respectively. Global energy investment is projected to surpass \$3 trillion for the first time in 2024, with \$2 trillion allocated specifically to clean energy technologies and infrastructure. Although it appears to be a significant investment, "today's [investment] trends are not aligned with the levels necessary for the world to have a chance of limiting global warming to 1.5°C above pre-industrial levels and to achieve the interim goals agreed at COP28^[2]" according to the International Energy Agency (IEA).

[1] <https://www.usda.gov/media/press-releases/2024/09/05/biden-harris-administration-announces-73-billion-clean-energy>

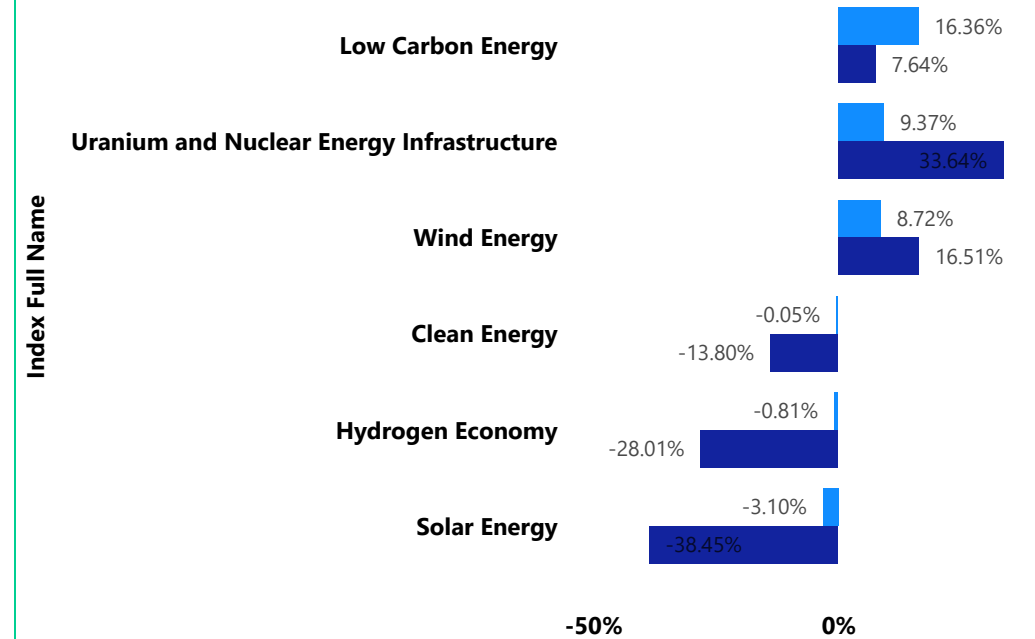
[2] <https://www.iea.org/reports/world-energy-investment-2024/overview-and-key-findings>

Clean Energy Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
SUNNOVA ENERGY INTERNATIONAL INC	74.55%
IHI CORP	74.09%
CERES POWER HOLDINGS PLC	68.23%
XPENG INC - ADR	66.17%
SINOSYNERGY ORD H	66.14%
POWERCELL SWEDEN AB	65.33%
NIO INC - ADR	60.58%
SUNRUN INC	52.28%
HEXAGON PURUS ASA	49.52%
TRANSALTA CORPORATION	46.33%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
SOLARMAX TECHNOLOGIES ORD	-80.81%
MEYER BURGER TECHNOLOGY AG	-79.24%
NIKOLA CORP	-44.08%
GREEN HYDROGEN SYSTEMS A/S	-38.28%
ARRAY TECHNOLOGIES INC	-35.67%
SMA SOLAR TECHNOLOGY AG	-28.76%
CHINA GOLD INTERNATIONAL RESOURCES CORP LTD	-26.78%
BUMHAN FUEL CELL CO LTD	-25.31%
AFC ENERGY PLC	-24.91%
ERAMET	-21.77%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
AFC ENERGY PLC	1.46
ANGLO PLATINUM LTD	1.52
BUMHAN FUEL CELL CO LTD	1.81
CHINA LONGYUAN POWER GROUP-H	1.40
CONTACT ENERGY LTD	1.34
DOOSAN FUEL CELL CO LTD	1.51
IHI CORP	1.37
MEYER BURGER TECHNOLOGY AG	1.51
OKLO INC	1.88
UNITED RENEWABLE ENERGY CO LTD	1.48

Quarterly Updates

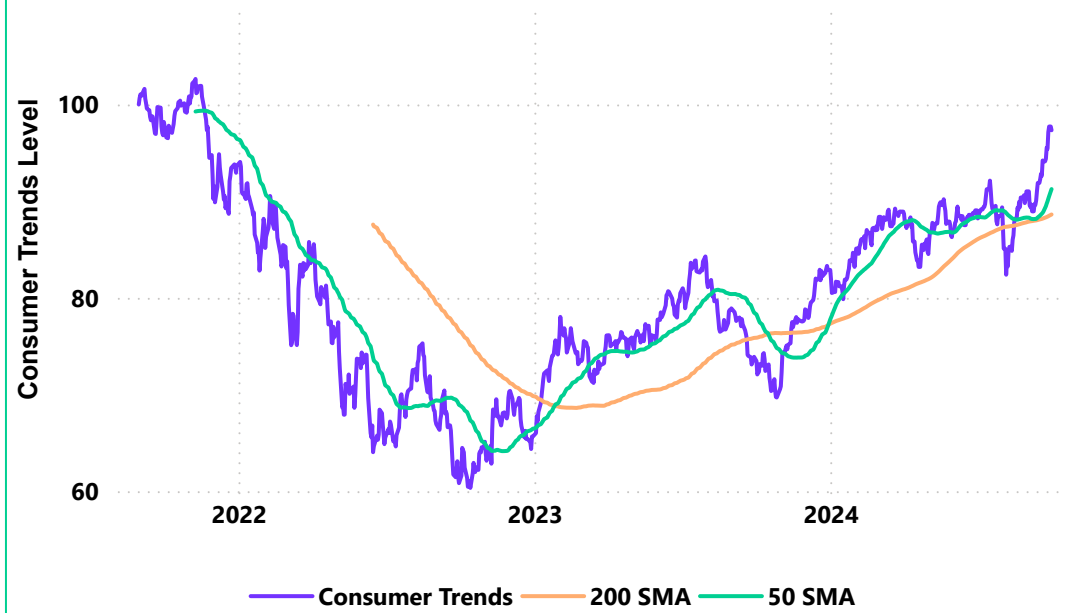
Consumer Trends metatheme finished the quarter strong, with a gain of 9.3%. The metatheme broke out over the 50 SMA and leads the 200 SMA by a wide margin. All but one comprising subtheme realized positive gains, with the one relative laggard being Metaverse and e-Games down just 0.2%.

Consumer expectations for the economy have been mixed. While inflation has moderated and jobs growth has been strong, confidence in future labor market conditions and income growth remains low. The consumer confidence index saw a notable decline in September 2024, marking the largest drop since 2021.[1] Despite all this, subthemes including Future of Food, Gaming, and E-Commerce US Leaders have had exceptional yearly returns, aided by the US Federal Reserve's front-loaded 50bps rate cut which can help stimulate the economy by lowering borrowing costs and encouraging consumer spending and business investment.

The Hotels, Airlines, and Cruises subtheme is also up over 38% this year. Airlines are witnessing a resurgence in both domestic and international travel. Leisure travel demand has rebounded strongly, though business travel is recovering but at a slower pace. In major industry news, amidst the failed merger of Spirit Airlines and JetBlue, Spirit Airlines is now exploring bankruptcy.

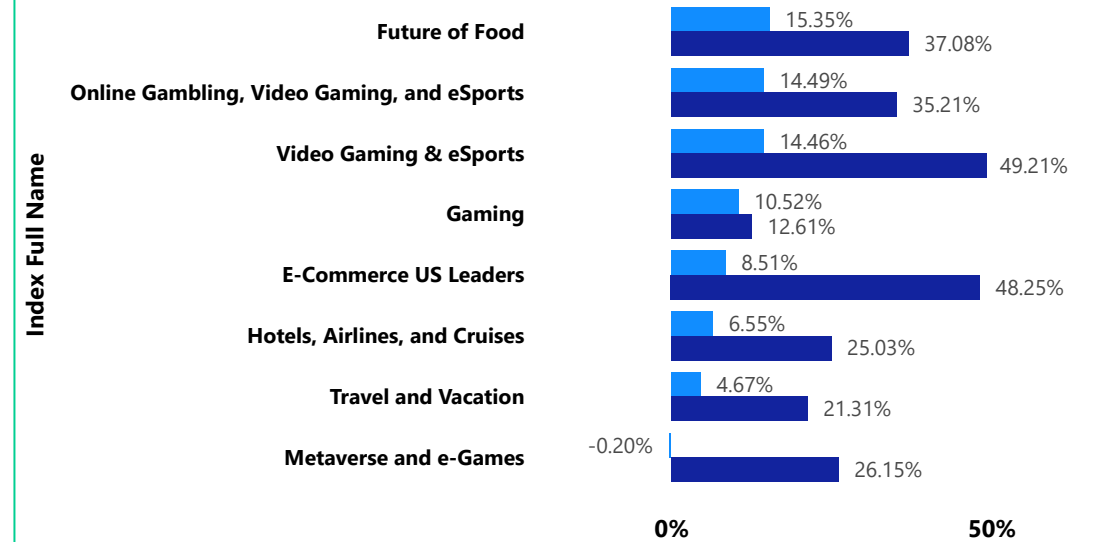
[1] <https://www.conference-board.org/topics/consumer-confidence>

Consumer Trends Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
PLAYTECH PLC	71.44%
UPSTART HOLDINGS INC	69.61%
CHINA FEIHE LTD	63.71%
APPLOVIN CORP	56.87%
EVERI HOLDINGS INC	56.43%
POINTSBET HOLDINGS LTD	54.85%
BALLYS CORP	44.11%
MEGACHIPS CORP	43.24%
CORBION NV	42.30%
ATOUR LIFESTYLE HOLDINGS-ADR	41.36%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
UBISOFT ENTERTAINMENT	-48.60%
STAR ENTERTAINMENT GRP LTD/THE	-37.41%
SNAP INC	-35.58%
FIVE9 INC	-34.85%
AVIDXCHANGE HOLDINGS INC	-32.75%
WIZZ AIR HOLDINGS PLC	-31.25%
HERBALIFE LTD	-30.80%
HIMAX TECHNOLOGIES INC	-30.73%
SMART EYE AB	-30.20%
PINTEREST INC	-26.55%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
ATOUR LIFESTYLE HOLDINGS-ADR	1.50
CALAVO GROWERS INC.	1.42
EVERI HOLDINGS INC	1.38
FLUTTER ENTERTAINMENT PLC	2.41
GAMESTOP CORP	1.69
IMMERSION CORPORATION	1.48
KANGWON LAND INC	1.42
KEYWORDS STUDIOS PLC	1.69
POINTSBET HOLDINGS LTD	1.37
VITAL FARMS INC	1.54

Quarterly Updates

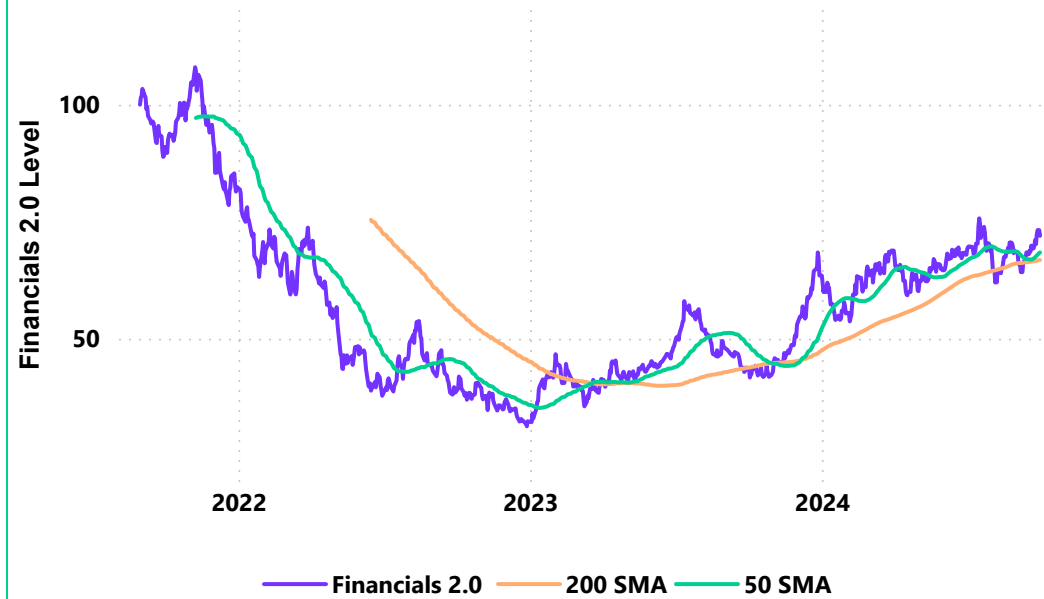
Financials 2.0 metatheme finished Q3 2024 up 5.93%, holding above the 50 and 200 SMA. The metatheme is in an ascending channel, with bullish momentum and a lot of ground to cover since its highs in 2021. All comprising subthemes were positive with the exception of Digital Assets Equity.

In the past few months, cryptocurrency markets have had notable regulatory developments. The approval of spot Ethereum ETFs in the U.S. and positive sentiment around major digital assets like Bitcoin have helped sustain trading volumes. These developments signal a continued maturation of the cryptocurrency space.

There has been quite a bit of buzz around Central Bank Digital Currency (CBDC) and how it has the potential to revolutionize the way money is transferred, increase financial inclusion, and provide more secure, efficient payment systems. In essence, CBDC is a digital currency that is issued by a central bank. CBDCs could streamline cross-border payments, reduce transaction costs, and offer central banks greater control over monetary policy.

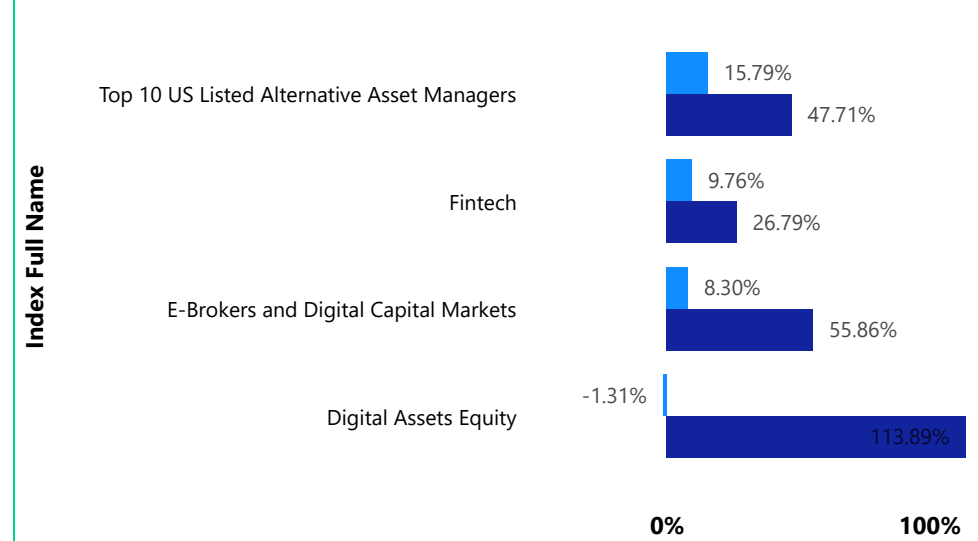
MarketVector's US Listed Alternative Asset Manager's Index had an outstanding quarter, rising nearly 16%. The companies comprising this index are steadily taking private lending share from traditional banks while the theme is capturing even more attention following StateStreet's filing for a private credit ETF.

Financials 2.0 Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
FUTU HOLDINGS LTD-ADR	45.80%
APPLIED DIGITAL CORPORATION	38.66%
VIRTU FINANCIAL INC	35.68%
AFFIRM HOLDINGS INC	35.12%
PAYPAL HOLDINGS INC.	34.46%
GUIDEWIRE SOFTWARE INC	32.67%
Q2 HOLDINGS INC	32.22%
NOMURA RESEARCH INSTITUTE LTD ORD	31.75%
ADYEN NV	31.08%
ACI WORLDWIDE INC	28.57%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
MONEYLION INC	-43.50%
CLEANSARK INC	-41.44%
WORLDLINE SA	-32.79%
PAGSEGURO DIGITAL LTD	-26.35%
IRIS ENERGY LTD	-25.24%
COINBASE GLOBAL INC -CLASS A	-19.83%
RIOT PLATFORMS INC	-18.82%
MARATHON DIGITAL HOLDINGS INC	-18.29%
HUT 8 CORP	-18.21%
BITFARMS LTD/CANADA	-17.90%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
APPLIED DIGITAL CORPORATION	1.67
BIT DIGITAL INC	1.27
ENVESTNET INC	1.28
EVERTEC INC	1.29
IRIS ENERGY LTD	1.58
KKR & CO INC	1.30
MONEYLION INC	1.35
NCINO INC	1.31
NORTHERN DATA AG	1.30
VIRTU FINANCIAL INC	1.32

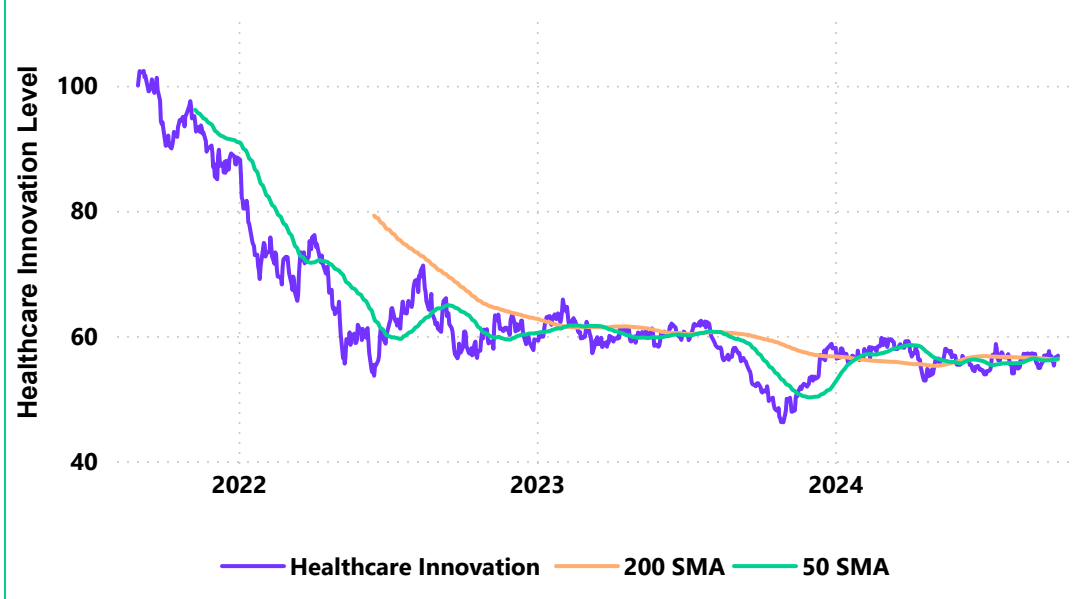
Quarterly Updates

Healthcare Innovation metatheme finished the quarter up 4.29%, trading inline with its 50 and 200 SMA. The metatheme is trading in a tight horizontal channel with levels of support and resistance seemingly holding strong. All comprising subthemes but one realized quarterly positive gains, with the underperformer being Bionic Healthcare.

Artificial intelligence is playing an increasingly pivotal role in biotech, especially in drug discovery and precision medicine. AI-driven platforms are improving disease detection, clinical trials, and treatment personalization by integrating data to better understand disease mechanisms and identify biomarkers. In addition, bioprinting and tissue engineering are gaining momentum, with applications in regenerative medicine and potential breakthroughs in organ fabrication for future transplantations.

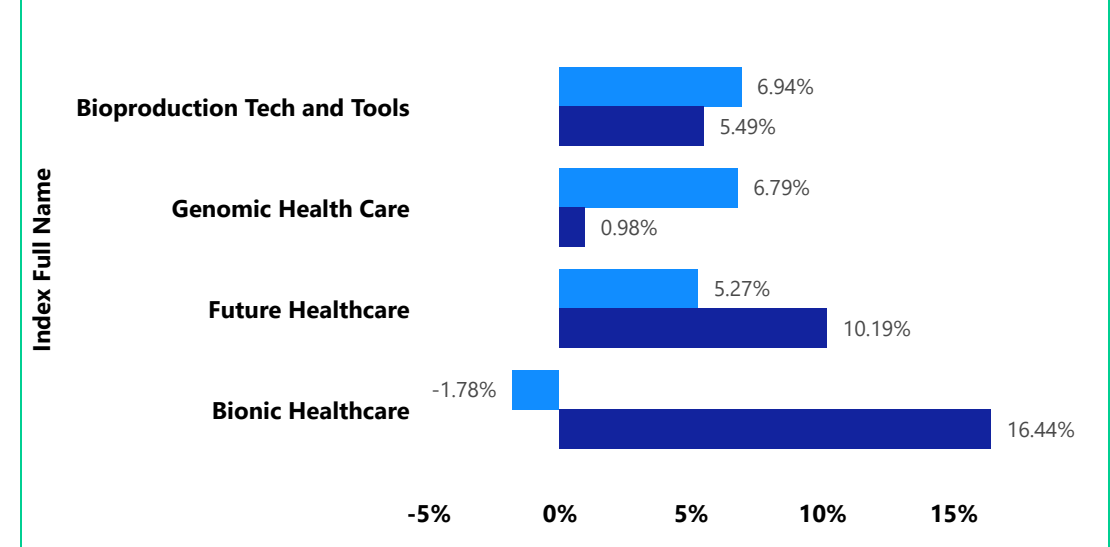
The targeted protein degradation (TPD) market is another area to watch, with new technologies like PROTACs and molecular glues advancing rapidly and entering clinical trials, offering promising new treatment avenues for diseases previously hard to target with conventional therapies

Healthcare Innovation Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
CAREDX INC	101.06%
OXFORD NANOPORE TECHNOLOGIES PLC	78.67%
ALIBABA HEALTH INFORMATION TECHNOLOGY LTD	71.80%
GENSCRIPT BIOTECH CORP	68.40%
JD HEALTH INTERNATIONAL INC	65.54%
WAVE LIFE SCIENCES PTE LTD	64.33%
EXACT SCIENCES CORP	61.23%
OMNICELL INC	61.06%
INSPIRE MEDICAL SYSTEMS INC	57.70%
VERACYTE INC	57.08%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
4D MOLECULAR THERAPEUTICS INC	-48.50%
ALPHATEC HOLDINGS INC	-46.79%
MODERNA INC	-43.72%
FULCRUM THERAPEUTICS INC	-42.42%
DEXCOM INC	-40.87%
AGILON HEALTH ORD	-39.91%
GINKGO BIOWORKS HOLDINGS INC	-39.05%
COMPUGROUP MEDICAL SE & CO KGA	-37.84%
CABALETTA BIO INC	-36.90%
OCUGEN INC	-35.99%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
CARSGEN THERAPEUTICS HOLDING	1.55
COMPUGROUP MEDICAL SE & CO KGA	1.44
EVOLENT HEALTH INC	1.45
FULCRUM THERAPEUTICS INC	1.64
GINKGO BIOWORKS HOLDINGS INC	1.59
HIMS & HERS HEALTH INC	1.45
PRIME MEDICINE INC	1.39
STANDARD BIOTOOLS INC	1.35
UNIQUIRE B.V.	1.50
WAVE LIFE SCIENCES PTE LTD	1.33

Quarterly Updates:

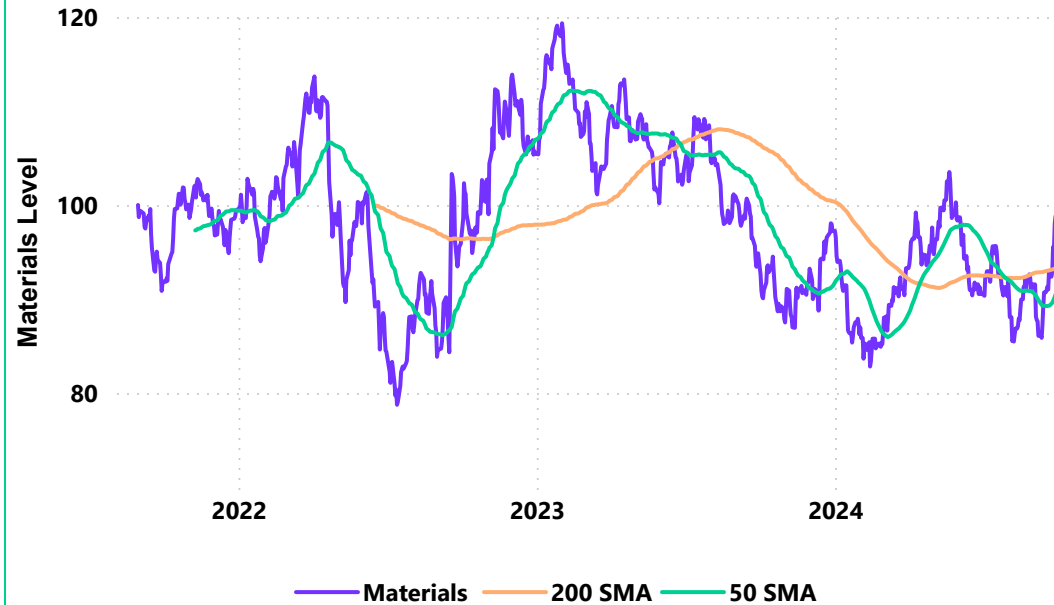
Materials metatheme finished the quarter up 9.17%, breaking out over the 50- and 200-day SMA. All subthemes are positive on the quarter, with the best performing subtheme being Junior Gold Miners, up 15.73%.

Gold miners, which have previously delinked from gold prices, are now reclaiming their role as leveraged plays on gold prices. Gold has surged to nearly \$2,646 per ounce and there have been many driving forces behind it. The first and most apparent reason has been geopolitical tensions, including the ongoing conflict between Russia and Ukraine, and most recently, the escalation in the Middle East, which has heightened uncertainty and led investors to seek the safety of gold. Additionally, central bank purchases & reserves have surged, particularly from emerging market countries like China and India. These central banks have been increasing their gold reserves as part of a broader effort to diversify away from reliance on the U.S. dollar.

The Rare Earth/Strategic Metals subtheme is an industry known for volatility, with rapidly changing supply and demand dynamics. Government defense implications and heavy China involvement have driven significant volatility in the industry historically- a competitive race for infrastructure and operating facilities for critical minerals has been somewhat intensifying between the U.S. and China. In the second quarter of 2024, the Biden-Harris Administration committed \$32 million toward projects aimed at developing facilities for the production of rare earth minerals, essential for various industries. This investment is part of the U.S.'s broader strategy to reduce dependence on China for these crucial resources.[1]

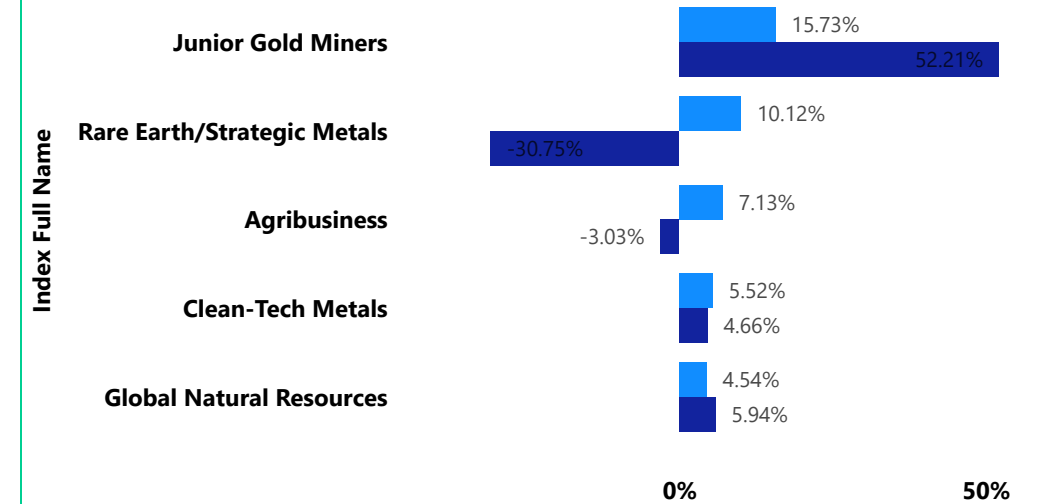
[1] Biden-Harris Administration Invests \$32 Million to Strengthen Nation's Critical Minerals Supply Chain | Department of Energy

Materials Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
OSISKO MINING INC	73.61%
PT BUMI RESOURCES MINERALS TBK ORD	69.82%
SKEENA RESOURCES LTD	58.49%
CALEDONIA MINING CORP PLC	53.91%
RESOLUTE MINING LTD	47.96%
JIANGXI GANFENG LITHIUM CO LTD	47.92%
NEW GOLD INC	47.69%
CALIBRE MINING CORP	46.80%
LUNDIN GOLD INC	46.53%
GATOS SILVER INC	44.44%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
BELLEVUE GOLD LTD	-23.11%
ERAMET	-21.77%
DISCOVERY SILVER CORP	-20.62%
ARIZONA METALS CORP	-18.70%
CIA DE MINAS BUENAVENTUR-ADR	-18.35%
OCCIDENTAL PETROLEUM CORP	-18.23%
PATRIOT BATTERY METALS INC	-18.18%
DEVON ENERGY CORPORATION	-17.47%
REPSOL SA	-16.37%
ARCADIUM LITHIUM PLC	-15.18%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
ANGLO PLATINUM LTD	1.52
BELLEVUE GOLD LTD	1.52
CALEDONIA MINING CORP PLC	1.47
FILO CORP	1.71
FORTESCUE METALS GROUP LTD	1.56
GATOS SILVER INC	1.47
GOLD ROYALTY ORD	1.57
OSISKO MINING INC	1.76
Vault Minerals	1.50
WESTGOLD RESOURCES PTY LTD	1.46

Quarterly Updates

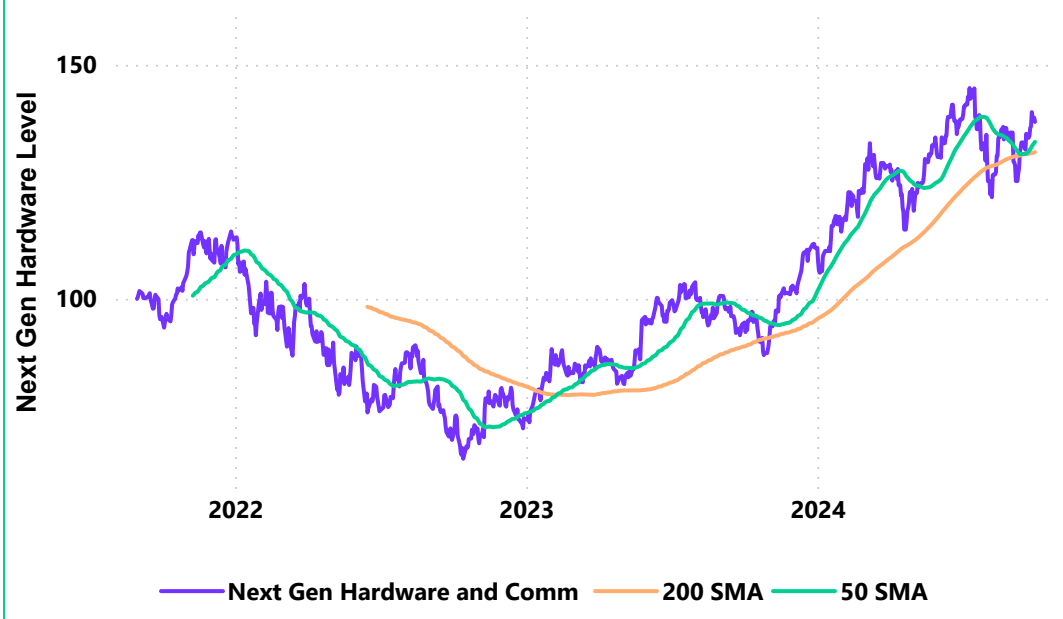
NextGen Hardware and Communication metatheme cooled off .39% in the 3rd quarter of 2024 after a nearly 27% increase in the quarter prior. The metatheme remains above its 50- and 200-day SMA and could set up for a triangle pattern with converging trendlines. The Connective Technologies subtheme was the only subtheme with positive performance. The US Listed Semiconductor 25 subtheme declined by about 6% but it is still up 69.43% on the year.

In the communications space, Samsung has made progress on 6G technology, emphasizing its potential to revolutionize connectivity by enabling ultra-fast, low-latency networks with applications in AI, immersive reality, and autonomous vehicles. They are also working on network slicing to enhance 5G and prepare for the transition to 6G. The US government acknowledged 6G technology as a national security effort at the 6G Symposium held in Washington D.C. on September 23rd of 2024.[1]

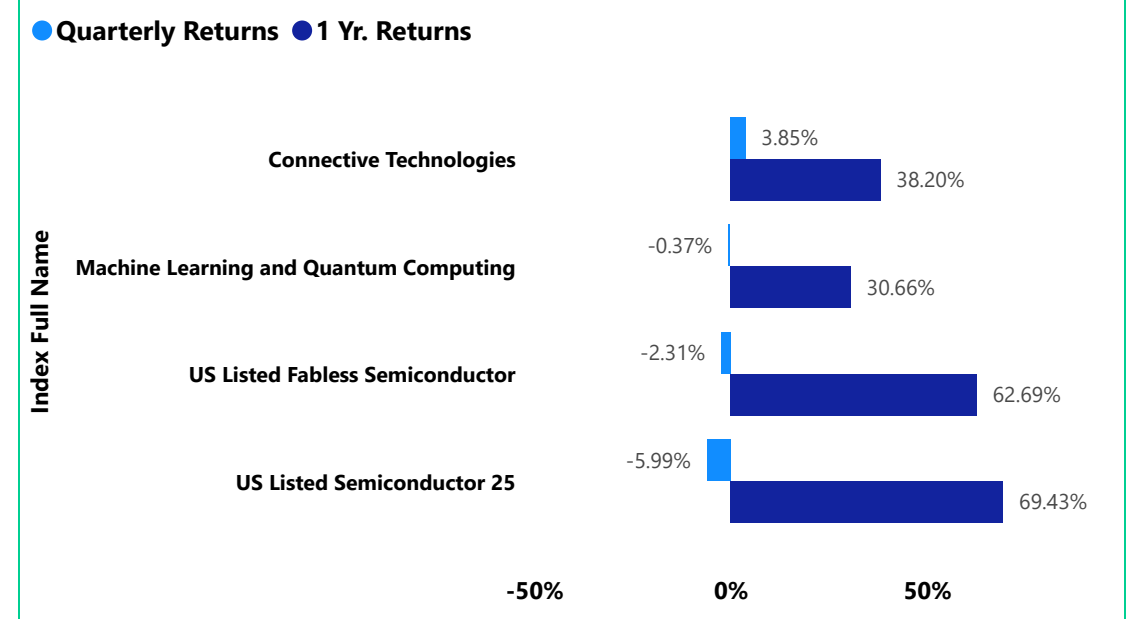
The semiconductor space as a whole has largely been led by US bellwether Nvidia Corp and its recent developments in AI processing capabilities. The company's sustained success and momentum, in addition to fiscal tailwinds from the US CHIPS and Science Act, has helped the industry remain at highs, instead of retracing gains after such a sharp appreciation in valuations.

[1] <https://www.6gworld.com/6gsymposium/>

Next Gen Hardware Three-Year Returns



Index Performance



Top 10 Stocks by Quarterly Return

Security Name	Return
COMMSCOPE HOLDING CO INC	396.75%
AST SPACEMOBILE INC	125.24%
SEMTECH CORP	52.81%
ALIBABA GROUP HOLDING-SP ADR	47.39%
IMPINJ INC	38.11%
SITIME CORP	37.89%
VIAMI SOLUTIONS INC	31.30%
FUJITSU LTD ORD	31.07%
F5 INC	27.85%
CIENA CORP	27.83%
INTERNATIONAL BUSINESS MACHINES CORP	27.83%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
ELASTIC NV	-32.61%
GLOBAL UNICHIP CORP	-29.79%
RAMBUS INC	-28.15%
MAXLINEAR INC-CLASS A	-28.10%
RIGETTI COMPUTING INC	-26.81%
SILICON MOTION TECHNOLOGY	-25.00%
STMICROELECTRONICS NV-NY SHS	-24.31%
INTEL CORP	-24.25%
NORDIC SEMICONDUCTOR ASA	-24.20%
FORMFACTOR INC	-24.00%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
ALLEGRO MICROSYSTEMS INC	1.25
AST SPACEMOBILE INC	1.93
COMMSCOPE HOLDING CO INC	1.31
HEWLETT PACKARD ENTERPRISE COMPANY	1.25
INFINERA CORP	1.70
INTEL CORP	1.33
MICRON TECHNOLOGY INC	1.27
ORANGE S.A.	1.45
UNIVERSAL DISPLAY CORP	1.28
VIASAT INC	1.43

Quarterly Updates

Next Gen Software metatheme gained 5.54% in the 3rd quarter of 2024, trading above both its 50- and 200-day SMA. The Digital Advertising and Artificial Intelligence finished the quarter up 15.51% and 1.48%, respectively, while the Big Data & AI subtheme finished the quarter down .28%.

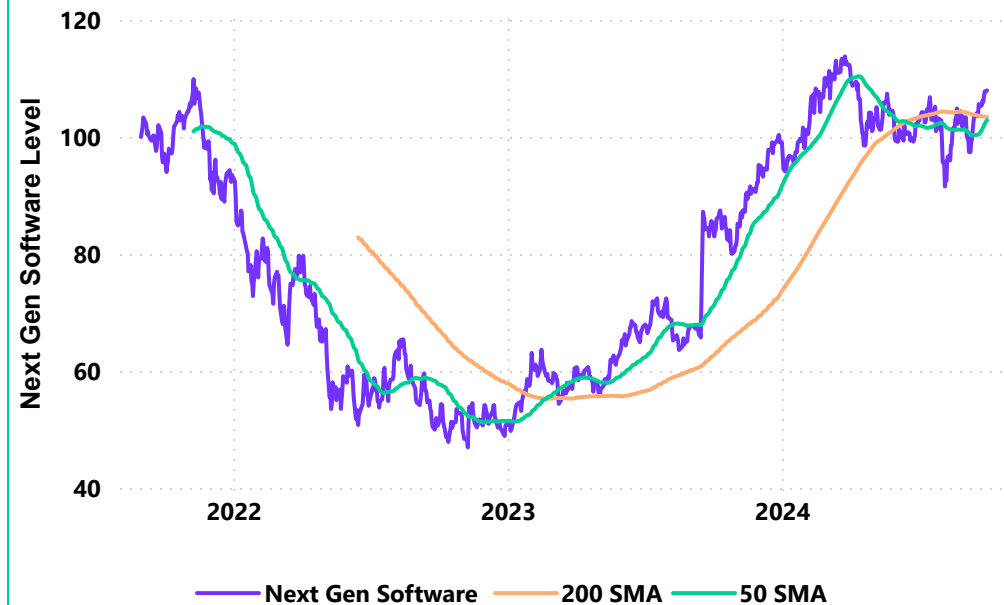
The Biden-Harris administration has launched new funding rounds, such as the \$504 million allocation for 12 Tech Hubs across the U.S., aimed at scaling up critical technologies as part of a larger strategy to strengthen U.S. competitiveness in emerging software technologies. Additionally, government agencies have been accelerating the adoption of AI technologies. For instance, the Office of Management and Budget (OMB) introduced new guidance for responsible AI acquisition, emphasizing the need for privacy, security, and transparency when integrating AI into government operations.

As the Artificial Intelligence subtheme progresses through its life cycle, there have been countless applications, features, capabilities, and industry developments. For instance, Alibaba Cloud recently released over 100 open-source AI models, collectively known as Qwen 2.5. The company also introduced Qwen2-VL, which is a vision language model that can comprehend videos of over 20 minutes in length. Additionally, ChatGPT released a voice mode that can now “see, hear, and speak.” This feature includes the ability to upload a picture and have a conversation with an AI model about it.[1]

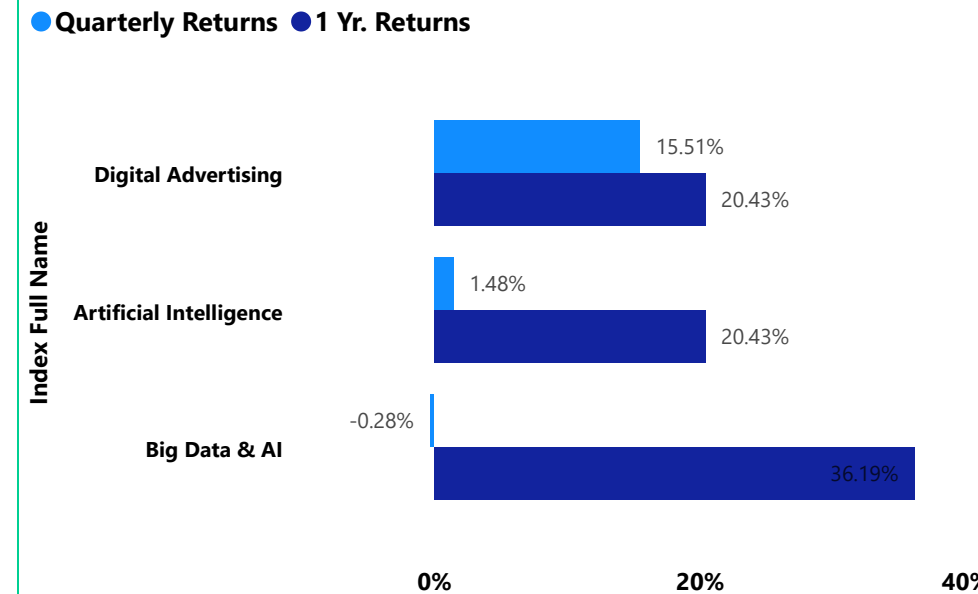
The Digital Advertising subtheme has experienced some interesting developments in the past quarter. The integration of artificial intelligence in digital advertising has been one of the biggest game-changers. Brands are increasingly using generative AI to create ad content, analyze data, and manage campaigns across their channels. Social media platforms like TikTok, Instagram, and Facebook have expanded their shopping features, known as “social commerce”.

[1] <https://openai.com/index/chatgpt-can-now-see-hear-and-speak/>

Next Gen Software Three-Year Returns



Index Performance



Top 10 Stocks by Quarterly Return

Security Name	Return
VOBILE GROUP LTD	75.29%
ZETA GLOBAL HOLDINGS CORP-A	69.01%
APPIER GROUP INC	65.79%
APPLOVIN CORP	56.87%
PALANTIR TECHNOLOGIES INC	46.86%
NEXXEN INTL LTD	43.06%
KLAVIYO SRS A ORD	42.15%
DIGITAL GARAGE INC	39.23%
WEIMOB INC	36.20%
INTERNATIONAL BUSINESS MACHINES CORP	27.83%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
CARDLYTICS INC	-61.02%
SUPER MICRO COMPUTER INC	-49.18%
PROS HOLDINGS INC	-35.36%
FIVE9 INC	-34.85%
ELASTIC NV	-32.61%
CONFLUENT INC-CLASS A	-30.99%
PUBMATIC INC	-26.78%
STMICROELECTRONICS NV-NY SHS	-24.31%
INTEL CORP	-24.25%
VERINT SYSTEMS INC	-21.34%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
BRAZE INC-A	1.27
CRITEO SA	1.34
INTEL CORP	1.33
LIVERAMP HOLDINGS INC	1.26
MICRON TECHNOLOGY INC	1.27
PEGASYSTEMS INC	1.26
PROS HOLDINGS INC	1.44
SALESFORCE INC	1.27
YOUGOV PLC	1.91
ZETA GLOBAL HOLDINGS CORP-A	1.46

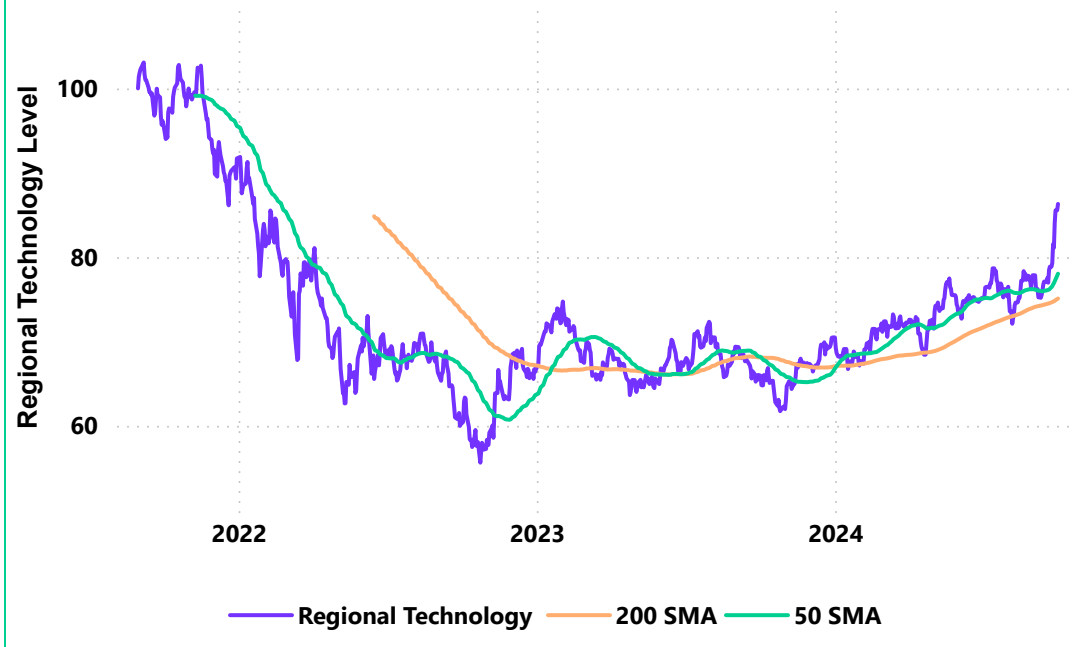
Quarterly Updates

Regional Technology metatheme finished the 3rd quarter of 2024 up 14.90%, largely led by gains in China Internet Software and Digital India. The metatheme broke out of its trading range and is now well above both its 50- and 200-day SMA.

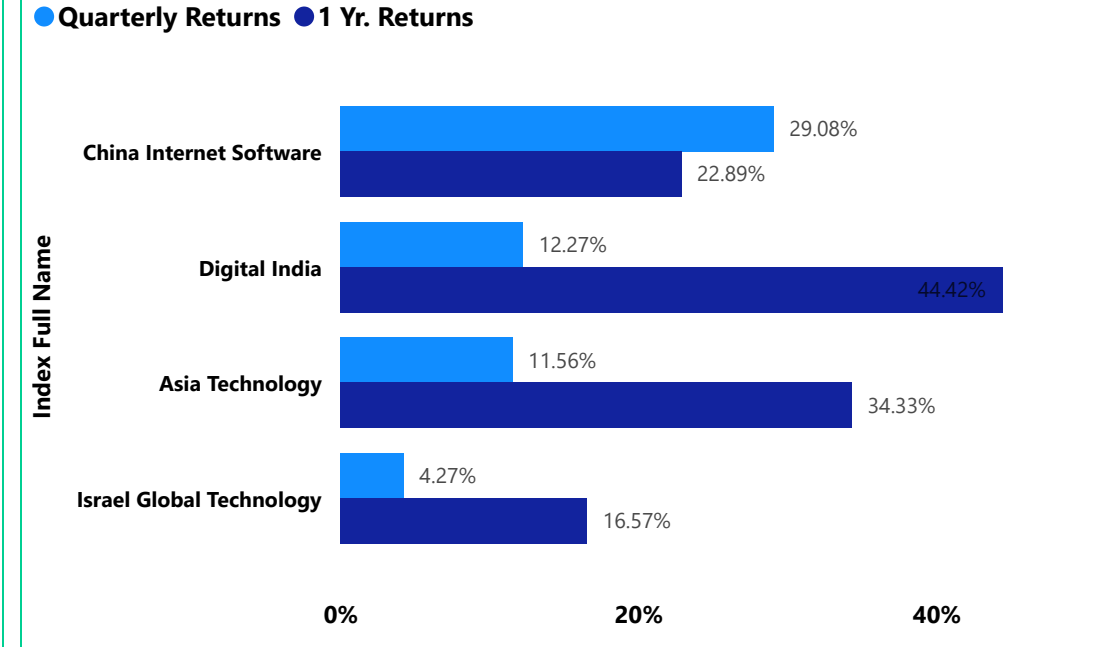
The China Internet Software subtheme was up over 29% last quarter largely due to stimulus measures introduced by the Chinese government aimed. These include interest rate cuts, mortgage support, and liquidity boosts, which have provided much-needed financial support to companies, particularly in the tech sector. Additionally, Chinese tech stocks had been trading at historically low valuations, making them attractive to investors seeking growth opportunities at discounted prices. As a result, major institutional investors have begun increasing their positions in these companies, contributing to the rally.

The Digital India subtheme has also seen strong gains of 12.27% this quarter and 44.42% this year. One key driver is India's robust economic growth, which is projected to grow by 6.5% in 2024, making it one of the fastest-growing economies globally. This growth is supported by rising consumer spending, an expanding middle class, and increasing investments in infrastructure and manufacturing.

Regional Technology Three-Year Returns



Index Performance



Top 10 Stocks by Quarterly Return

Security Name	Return
GDS HOLDINGS LTD	119.59%
KORNIT DIGITAL LTD	76.47%
ALIBABA HEALTH INFORMATION TECHNOLOGY LTD	71.80%
ONE 97 COMMUNICATIONS LTD	70.49%
JD HEALTH INTERNATIONAL INC	65.54%
EAST BUY HOLDING LTD	57.37%
MEITUAN	55.60%
JD.COM INC-ADR	54.80%
BILIBILI INC-SPONSORED ADR	51.42%
QIFU TECHNOLOGY INC	51.09%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
MOBILEYE GLOBAL INC-A	-51.22%
VODAFONE IDEA LTD	-42.37%
MAYTRONICS LTD	-39.79%
CAMTEK LTD	-36.24%
PRIORTECH LTD	-30.10%
NEXT VISION STABILIZED SYSTE	-26.15%
RISKIFIED LTD	-25.98%
SILICON MOTION TECHNOLOGY	-25.00%
UROGEN PHARMA LTD	-24.31%
JFROG LTD	-22.66%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
ASMPT LIMITED	1.47
BIRLASOFT INDIA LTD	1.39
GILAT SATELLITE NETWORKS LTD	1.39
HFCL LTD	1.39
IIFL FINANCE LTD	1.39
KAYNES TECHNOLOGY INDIA LTD	1.49
MAYTRONICS LTD	1.55
MPHASIS LTD	1.57
TATA ELXSI LTD	1.45
UROGEN PHARMA LTD	1.51

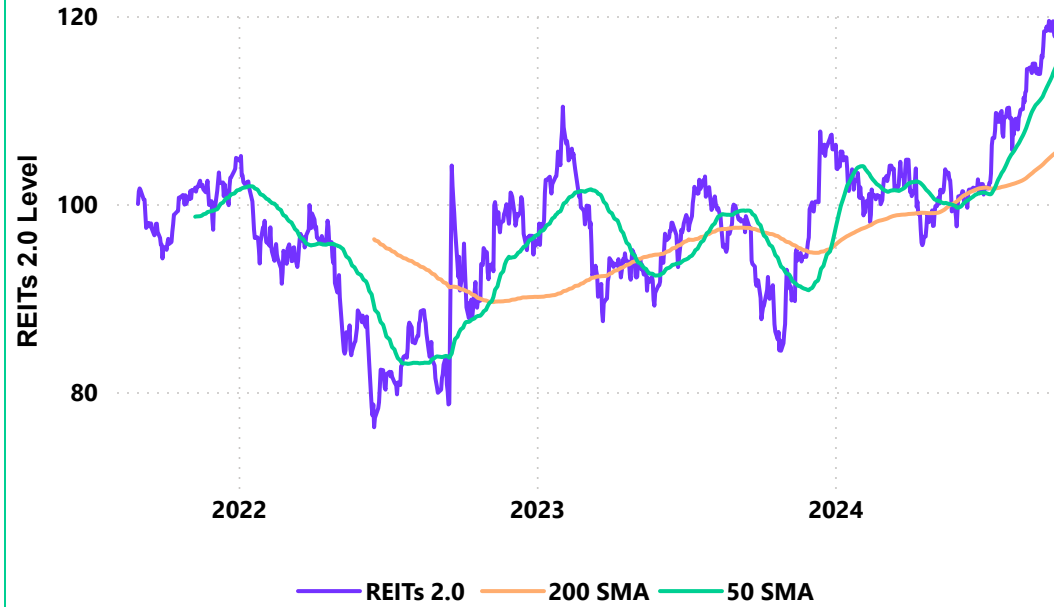
Quarterly Updates

REITs 2.0 metatheme finished the quarter up 15.93%, breaking out over key levels to all-time highs. The metatheme now trades well above its 50- and 200-day moving averages.

REITs are particularly sensitive to interest rates since they heavily rely on debt financing for real estate projects. A recent 50 basis point rate cut, along with expectations of further rate reductions, has driven the metatheme to new highs. Furthermore, growth in key sectors such as data centers and logistics infrastructure is accelerating, with strong demand for real estate in areas like warehousing and data centers, largely fueled by e-commerce and the integration of AI. This demand, combined with the steady dividend yields REITs provide, has made them especially attractive to income-focused investors.

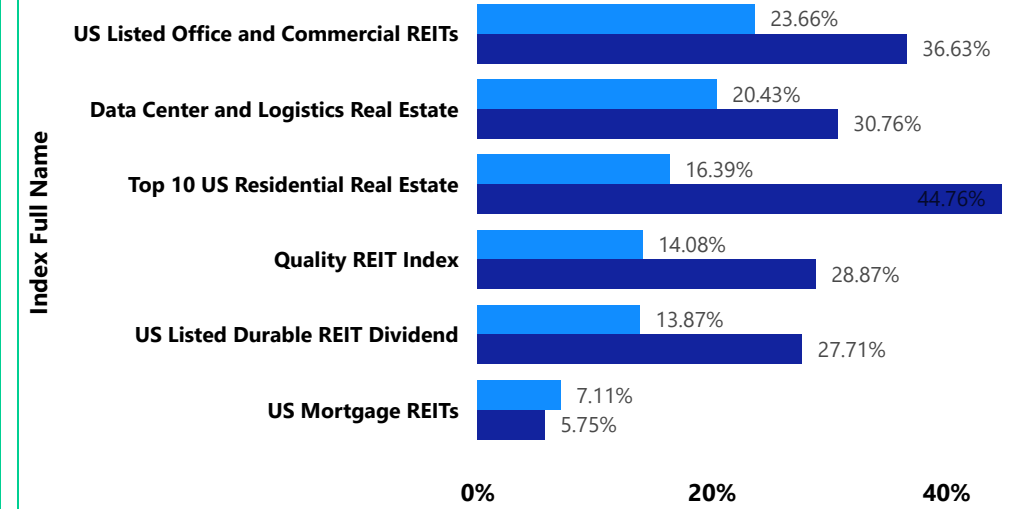
The US Listed Office and Commercial REITs subtheme was the top performing subtheme this quarter, up 23.66%. The new norm of work-from-home flexibility had significantly hurt this sector, but its recent rise could be partly due to a rebound from previously depressed levels. The subtheme may be benefiting from a correction as it recovers from sharp declines.

REITs 2.0 Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
GDS HOLDINGS LTD	119.59%
VNET GROUP INC	94.75%
UNITI GROUP INC	93.15%
VORNADO REALTY TRUST	49.87%
PIEDMONT OFFICE REALTY TRUST INC	39.31%
APPLIED DIGITAL CORPORATION	38.66%
KKR REAL ESTATE FINANCE TRUS	36.46%
D R HORTON INC	35.37%
COGENT COMMUNICATIONS HOLDINGS INC	34.51%
IRON MTN INC	32.59%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
SERVICE PROPERTIES TRUST	-11.28%
READY CAPITAL CORP	-6.72%
APOLLO COMMERCIAL REAL ESTATE	-6.13%
RLJ LODGING TRUST	-4.67%
HOST HOTELS & RESORTS INC	-2.11%
INVITATION HOMES INC	-1.76%
BRIGHTSPIRE CAPITAL INC	-1.75%
WAREHOUSES DE PAUW SCA	-1.56%
ORCHID ISLAND CAPITAL INC	-1.44%
MONTEA NV	-0.73%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
APPLIED DIGITAL CORPORATION	1.67
DYNEX CAPITAL INC	1.25
IRON MTN INC	1.18
LONDONMETRIC PROPERTY PLC	1.39
NEXTDC LTD	1.36
ORCHID ISLAND CAPITAL INC	1.26
READY CAPITAL CORP	1.16
SERVICE PROPERTIES TRUST	1.21
UMH PROPERTIES INC	1.18
UNITI GROUP INC	1.28

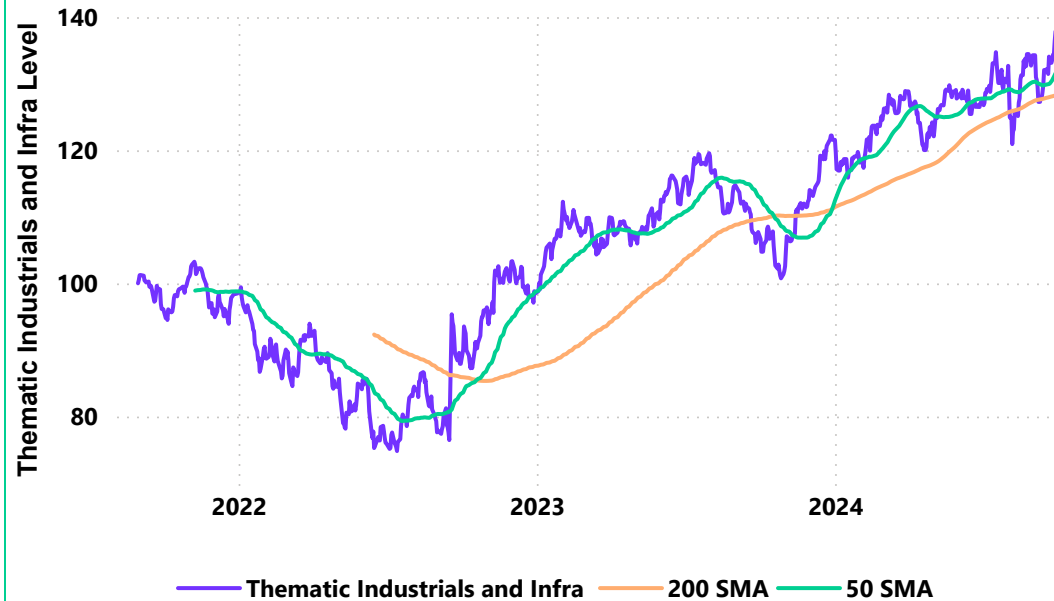
Quarterly Updates

• **Thematic Industrials and Infrastructure** metatheme finished the quarter up 7.46%. The metatheme now holds above the 50- and 200-day SMA. Nearly all comprising subthemes were positive on the quarter, with the exception of Robotics and Robotics & 3D Printing.

A key trend in the Space Industry is the development of multi-orbit constellations and the integration of LEO (Low Earth Orbit) constellations into communications systems. The growing demand for secure and reliable communications, especially for military applications, is driving innovation in satellite manufacturing and design. AST SpaceMobile stands out as a key proponent of this technology and finished the quarter up over 125%.

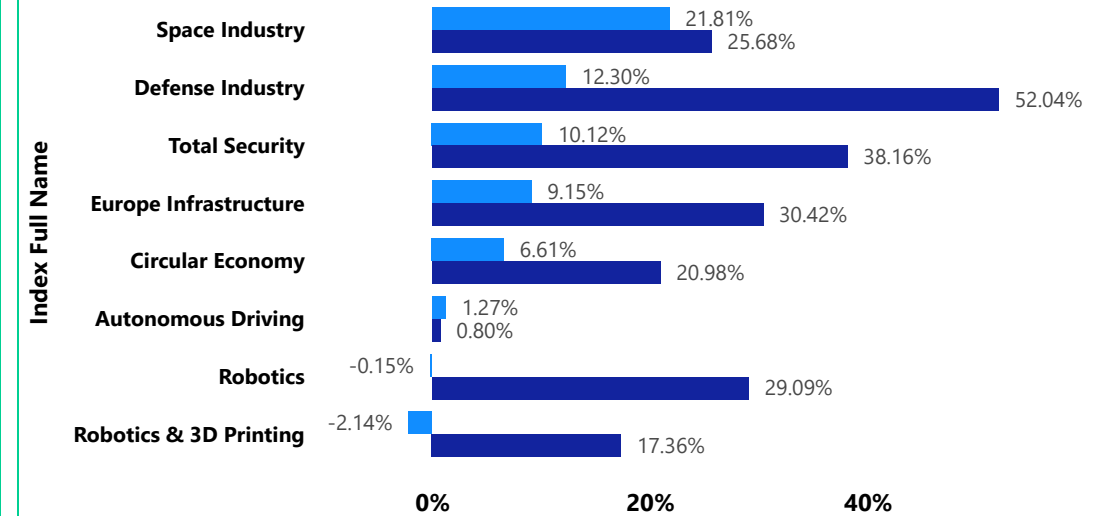
The Defense Industry subtheme has experienced consistent growth in valuations, contracts, and overall focus, driven by increasing geopolitical tensions and rising defense budgets globally. Governments around the world are prioritizing military modernization and investing in advanced technologies like AI, drones, and space warfare, fueling demand for defense contractors. As companies secure larger contracts and diversify their portfolios, the defense industry is positioned for sustained expansion and continues to attract investor attention in an industry once thought to be cyclical.

Thematic Industrials and Infra Three-Year Returns



Index Performance

● Quarterly Returns ● 1 Yr. Returns



Top 10 Stocks by Quarterly Return

Security Name	Return
AST SPACEMOBILE INC	125.24%
AURORA INNOVATION INC	113.72%
ROCKET LAB USA INC	102.71%
CLEAR SECURE INC -CLASS A	77.12%
XPENG INC - ADR	66.17%
NIO INC - ADR	60.58%
PALANTIR TECHNOLOGIES INC	46.86%
TREND MICRO INC	46.03%
THAICOM PCL	45.50%
LI AUTO INC	43.46%

Bottom 10 Stocks by Quarterly Return

Security Name	Return
IMOTIONAUTOTECH ORD H	-64.27%
MOBILEYE GLOBAL INC-A	-51.22%
LUMINAR TECHNOLOGIES INC-CL A	-39.62%
CAMTEK LTD	-36.24%
OUSTER INC	-35.91%
INDIE SEMICONDUCTOR INC	-35.33%
TOWA CORP	-34.33%
TOKYO SEIMITSU	-30.99%
DISCO CORP ORD	-30.97%
HIMAX TECHNOLOGIES INC	-30.73%

Top 10 Stocks by Unusual Volume

Security Name	3m/12m Vol
ASMP T LIMITED	1.47
AST SPACEMOBILE INC	1.93
CERENCE INC	1.56
CROWDSTRIKE HOLDINGS INC	1.57
DISCO CORP ORD	1.44
IMMERSION CORPORATION	1.48
SIRIUSXM HOLDINGS INC	1.78
SMURFIT WESTROCK PLC	1.65
UMICORE	1.48
VIASAT INC	1.43

APPENDIX: INDEX SHORT NAMES

Index Full Name	Ticker	Metatheme Name
Clean Energy	MVCET	Clean Energy
Electric Vehicle Industry	BEV	Clean Energy
Global Climate Positive	ETHOI	Clean Energy
Hydrogen Economy	MVHTWO	Clean Energy
Low Carbon Energy	MVSMOG	Clean Energy
Solar Energy	BSOLR	Clean Energy
Uranium and Nuclear Energy Infrastructure	MVNUCL	Clean Energy
Wind Energy	BWIND	Clean Energy
Autonomous Driving	BAUT	Consumer Trends
E-Commerce US Leaders	BECOM	Consumer Trends
Future of Food	MVFOF	Consumer Trends
Gaming	MVBJK	Consumer Trends
Hotels, Airlines, and Cruises	BCRUZ	Consumer Trends
Metaverse and e-Games	MVMETV	Consumer Trends
Online Gambling, Video Gaming, and eSports	BVGOG	Consumer Trends
Travel and Vacation	BTOUR	Consumer Trends
Video Gaming & eSports	MVESPO	Consumer Trends
Digital Assets Equity	MVDAPP	Financials 2.0
E-Brokers and Digital Capital Markets	BBIDS	Financials 2.0
Fintech	BFNQ	Financials 2.0
Top 10 US Listed Alternative Asset Managers	BUALT	Financials 2.0
Bionic Healthcare	MVBION	Healthcare Innovation
Bioproduction Tech and Tools	MVBIOP	Healthcare Innovation
Future Healthcare	MVFHC	Healthcare Innovation
Genomic Health Care	BDNAPR	Healthcare Innovation
Agribusiness	MVMOO	Materials
Clean-Tech Metals	MVGMET	Materials
Global Natural Resources	MVGNR	Materials
Junior Gold Miners	MVGDXJ	Materials
Rare Earth/Strategic Metals	MVREMX	Materials
Artificial Intelligence	BAIPR	Next Gen Software
Big Data & AI	BDAI	Next Gen Software
Digital Advertising	BADTQ	Next Gen Software

Index Full Name	Ticker	Metatheme Name
5G Communications	BFIVG	Next Gen Hardware and Comm
Connective Technologies	BCNCT	Next Gen Hardware and Comm
Machine Learning and Quantum Computing	BQTUM	Next Gen Hardware and Comm
US Listed Fabless Semiconductor	MVSMHX	Next Gen Hardware and Comm
US Listed Internet Infrastructure	BUII	Next Gen Hardware and Comm
US Listed Semiconductor 25	MVSMH	Next Gen Hardware and Comm
Asia Technology	BSEAQ	Regional Tech
China Internet Software	BCHNQ	Regional Tech
Digital India	MVDIND	Regional Tech
Israel Global Technology	BGTH	Regional Tech
Data Center and Logistics Real Estate	BDLRT	REIT 2.0
Quality REIT Index	IRET	REIT 2.0
Top 10 US Residential Real Estate	BURRT	REIT 2.0
US Listed Durable REIT Dividend	DURE	REIT 2.0
US Listed Office and Commercial REITs	MVORT	REIT 2.0
US Mortgage REITs	MVMORT	REIT 2.0
Circular Economy	MVCIRC	Thematic Industrials and Infra
Defense Industry	MVDEF	Thematic Industrials and Infra
Europe Infrastructure	BEURI	Thematic Industrials and Infra
Robotics	BRBT	Thematic Industrials and Infra
Robotics & 3D Printing	BRB3D	Thematic Industrials and Infra
Space Industry	MVSPC	Thematic Industrials and Infra
Total Security	BTOT	Thematic Industrials and Infra

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Metatheme returns referenced throughout this document are based on composite portfolios comprised of a select group of indexes mapped to each metatheme, and are for illustrative/informational purposes only. The indexes used to calculate each metatheme’s returns are displayed on the individual metatheme pages. Composite portfolio are calculated as a price return time series of an equally weighted portfolio of the indexes included, rebalanced on a quarterly basis effective at the open on the day following the third Friday of March, June, September, and December. Individual stocks referenced in this document were index components of one of MarketVector’s Indexes as of Jan, 2024.

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