

Quarterly Thematic Index Performance Review

Thematic Index Round-Up

MV Index Solutions (MVIS[®]) publishes 52 thematic indices to cover forward-looking investment concepts grouped into meta themes: Clean Energy, Health Care Innovation, Financials 2.0, NextGen Hardware & Communications, NextGen Software, Consumer Trend, Thematic Industrials & Infrastructure, Thematic REITs, Materials, and Disruptive Technology.

In Q3 2021, Materials outperformed while Clean Energy and Financials 2.0 continued their underperformance. Although, in aggregate, Materials outperformed, within Materials wide dispersions were seen with MVIS Global Rare Earth/Strategic Metals up 23% USD and MVIS Global Junior Gold Miners down -18% USD for Q3 2021.

Exhibit 1: Meta Thematic Returns (USD, ending 30 September 2021)

Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	Q1-2021	Q2-2021	Q3-2021
Thematic REITs -6.4%	Next Gen Software 26.1%	Clean Energy 5.8%	NextGen Hardware & Communications 5.5%	Health Care Innovation 20.1%	Health Care Innovation -8.1%	Next Gen Software 49.2%	Clean Energy 42.4%	Clean Energy 54.2%	Financials 2.0 31.3%	Thematic REITs 8.5%	Materials 3.6%
Clean Energy -8.1%	Health Care Innovation 23.1%	Thematic Industrials & Infrastructure 5.5%	Thematic REITs 4.7%	Clean Energy 15.4%	Next Gen Software -10.9%	Clean Energy 49.1%	Disruptive Technology 13.7%	Financials 2.0 35.8%	NextGen Hardware & Communications 10.0%	Thematic Industrials & Infrastructure 7.8%	Thematic Industrials & Infrastructure 1.1%
Materials -10.0%	Thematic Industrials & Infrastructure 18.7%	Health Care Innovation 4.9%	Clean Energy 0.9%	NextGen Hardware & Communications 13.7%	Financials 2.0 -12.7%	Health Care Innovation 47.3%	Consumer Trends 11.0%	Disruptive Technology 30.9%	Thematic Industrials & Infrastructure 8.8%	NextGen Hardware & Communications 7.8%	Thematic REITs -0.8%
NextGen Hardware & Communications -14.2%	Disruptive Technology 18.0%	Disruptive Technology 4.1%	Thematic Industrials & Infrastructure 0.4%	Consumer Trends 12.0%	Clean Energy -14.0%	Financials 2.0 31.9%	Thematic Industrials & Infrastructure 10.8%	Health Care Innovation 30.9%	Consumer Trends 7.0%	Next Gen Software 7.3%	NextGen Hardware & Communications -1.9%
Consumer Trends -14.8%	NextGen Hardware & Communications 18.0%	Financials 2.0 3.4%	Consumer Trends -1.5%	Disruptive Technology 11.6%	Disruptive Technology -14.3%	NextGen Hardware & Communications 29.5%	Materials 10.7%	Materials 26.0%	Materials 5.6%	Materials 7.2%	Consumer Trends -6.4%
Financials 2.0 -15.6%	Clean Energy 16.3%	Materials 3.1%	Financials 2.0 -1.6%	Next Gen Software 10.8%	NextGen Hardware & Communications -17.9%	Disruptive Technology 28.8%	Health Care Innovation 9.9%	Next Gen Software 23.7%	Thematic REITs 5.0%	Disruptive Technology 4.6%	Disruptive Technology -8.6%
Next Gen Software -17.2%	Consumer Trends 14.9%	Thematic REITs 2.6%	Next Gen Software -2.4%	Materials 9.4%	Thematic Industrials & Infrastructure -20.8%	Materials 28.4%	Financials 2.0 9.4%	NextGen Hardware & Communications 23.6%	Disruptive Technology 4.8%	Health Care Innovation 4.3%	Next Gen Software -9.3%
Disruptive Technology -17.4%	Materials 12.8%	NextGen Hardware & Communications 2.2%	Materials -4.4%	Financials 2.0 6.1%	Materials -26.8%	Thematic Industrials & Infrastructure 26.8%	NextGen Hardware & Communications 8.9%	Consumer Trends 22.7%	Next Gen Software 1.8%	Consumer Trends 1.3%	Health Care Innovation -10.8%
Thematic Industrials & Infrastructure -18.8%	Thematic REITs 12.8%	Consumer Trends 2.0%	Disruptive Technology -4.5%	Thematic Industrials & Infrastructure 5.7%	Consumer Trends -27.0%	Consumer Trends 25.3%	Next Gen Software 7.5%	Thematic Industrials & Infrastructure 16.8%	Health Care Innovation -3.1%	Clean Energy -1.1%	Clean Energy -10.8%
Health Care Innovation -23.0%	Financials 2.0 9.7%	Next Gen Software -3.3%	Health Care Innovation -8.9%	Thematic REITs 3.8%	Thematic REITs -32.4%	Thematic REITs 19.6%	Thematic REITs 2.5%	Thematic REITs 15.1%	Clean Energy -5.0%	Financials 2.0 -4.6%	Financials 2.0 -11.7%

Source: MV Index Solutions. Meta Thematic index returns are the equal weighted returns of underlying Thematic indices listed in Exhibit 2.

Over the last quarter ending Q3 2021, the top performing MVIS index was MVIS Global Rare Earth/Strategic Metals (23% USD, Total Return) and the bottom performing MVIS index was BlueStar China Internet Software (-30% USD, Total Return).

Exhibit 2: Thematic Index Returns (USD, ending 30 September 2021)

Index Ticker	Index Name	Meta Theme	Launch Date	Base Date	Quarterly Returns (USD)				Last 3 Years (USD)		
					Q3-2021	Q2-2021	Q1-2021	Q4-2020	Ann Ret	Ann Stdev	Max Mon Draw-Down
BWINDNTR	* BlueStar Wind Energy Industry	Clean Energy	03/23/21	12/31/14	0.9%	-5.7%	-5.3%	44.7%	30.1%	23.5%	-12.3%
BGTQNTR	* BlueStar Global GreenTech	Clean Energy	07/06/20	12/30/16	-5.3%	3.6%	0.3%	36.2%	32.1%	25.7%	-17.9%
MVSMOGR	MVIS Global Low Carbon Energy	Clean Energy	02/23/21	12/31/15	-6.7%	3.8%	-8.1%	41.3%	38.0%	27.2%	-17.2%
BSOLRNTR	* BlueStar Solar Energy Industry	Clean Energy	03/09/20	12/31/14	-7.5%	-3.7%	-9.0%	65.0%	70.5%	40.3%	-28.5%
MVHTWOTR	MVIS Global Hydrogen Economy	Clean Energy	12/22/20	12/15/20	-17.4%	-5.9%	1.1%				
BHDROTR	BlueStar Hydrogen and NextGen Fuel Cell	Clean Energy	03/09/21	06/30/20	-19.1%	-10.1%	-1.2%	80.7%			
BEVNTR	* BlueStar Electric Vehicle Industry	Clean Energy	01/19/21	12/29/17	-20.6%	10.3%	-12.5%	57.5%	51.2%	58.4%	-19.0%
BETORNTR	* BlueStar Europe Travel and Vacation	Consumer Trends	05/12/21	12/31/15	1.9%	-5.7%	8.7%	38.9%	-9.5%	42.7%	-36.3%
BCRUZTR	BlueStar Hotels, Airlines, and Cruises	Consumer Trends	06/01/21	12/31/17	-0.6%	-5.1%	17.2%	30.2%	-3.8%	39.6%	-36.0%
BTOURTR	BlueStar Travel and Vacation	Consumer Trends	02/05/21	12/31/15	-2.5%	-4.2%	18.1%	34.6%	3.2%	40.5%	-38.2%
BECOMNTR	* BlueStar E-Commerce US Leaders	Consumer Trends	09/11/18	12/28/12	-3.3%	8.3%	2.1%	19.5%	21.2%	24.8%	-14.0%
BAUTNTR	* BlueStar Autonomous Driving	Consumer Trends	05/10/18	12/28/12	-5.1%	5.9%	9.5%	35.1%	17.9%	29.5%	-21.6%
MVBJKTR	MVIS Global Gaming	Consumer Trends	05/08/12	12/29/06	-8.5%	-0.3%	14.2%	20.2%	9.6%	33.2%	-28.5%
BATORNTR	* BlueStar Asia Travel and Vacation	Consumer Trends	06/24/21	12/31/15	-9.2%	-5.7%	12.3%	14.0%	-2.0%	27.6%	-21.2%
MVESPTR	MVIS Global Video Gaming & eSports	Consumer Trends	07/16/18	12/31/14	-10.1%	7.1%	-2.7%	14.6%	26.3%	20.4%	-15.8%
BEGAMNTR	* BlueStar E-Games	Consumer Trends	10/05/18	12/29/14	-10.3%	5.0%	1.3%	10.9%	15.4%	19.2%	-12.6%
BCCONTR	* BlueStar China Mainland Consumer 50	Consumer Trends	06/24/21	12/31/15	-11.2%	4.0%	-8.1%	29.6%	27.8%	26.9%	-16.7%
MVFOFTR	MVIS Global Future of Food	Consumer Trends	09/09/21	12/31/19	-11.3%	5.0%	4.7%	2.4%			
BGTHTR	BlueStar Israel Global Technology	Disruptive Technology	01/31/14	12/31/03	-5.4%	7.4%	-5.4%	24.4%	23.9%	23.2%	-13.9%
BGTNATR	BlueStar Israel Global Technology North America	Disruptive Technology	04/19/21	12/17/20	-6.2%	11.0%	-5.2%				
B3DPNTR	* BlueStar 3D Printing	Disruptive Technology	05/12/21	12/29/17	-10.2%	-3.3%	22.4%	43.5%	15.0%	41.3%	-19.7%
BSEAQNTR	* BlueStar Asia Technology	Disruptive Technology	08/13/18	06/29/13	-12.6%	3.4%	7.4%	24.9%	23.1%	25.4%	-13.4%
BFNQNTR	* BlueStar Fintech	Financials 2.0	11/07/17	06/29/12	-2.5%	5.4%	-2.9%	26.2%	14.0%	28.7%	-22.5%
MVDAPTR	MVIS Global Digital Assets Equity	Financials 2.0	03/08/21	02/26/21	-12.2%	-23.1%					
BBIDSTR	BlueStar Global E-Brokers and Digital Capital Markets	Financials 2.0	08/23/21	12/31/19	-15.8%	2.3%	40.9%	36.2%			
BEBKRNTR	* BlueStar E-Brokers and Digital Capital Markets	Financials 2.0	03/31/21	12/29/17	-16.6%	-3.2%	55.8%	44.8%	29.9%	28.9%	-12.7%
BEHCNTR	* BlueStar E-Healthcare	Health Care Innovation	01/22/21	12/31/15	-10.1%	2.7%	-3.3%	18.7%	27.6%	24.9%	-12.7%
BDNANTR	* BlueStar Genomic Health Care	Health Care Innovation	05/22/20	12/31/15	-11.5%	5.9%	-2.8%	43.0%	19.1%	33.3%	-15.1%
MVREMTR	MVIS Global Rare Earth/Strategic Metals	Materials	10/13/10	12/28/07	23.2%	15.0%	14.3%	73.1%	25.1%	40.9%	-17.4%
BACOMNTR	* BlueStar Asia-Pacific Commodities	Materials	06/24/21	12/31/15	11.4%	10.5%	4.3%	24.3%	18.9%	23.7%	-12.6%
BMOONTR	* BlueStar Agribusiness 50	Materials	05/03/21	12/31/15	0.7%	1.9%	14.0%	16.7%	12.0%	18.8%	-13.4%
MVMOOTR	MVIS Global Agribusiness	Materials	07/18/12	12/29/06	0.4%	4.2%	12.5%	16.5%	13.3%	19.0%	-14.1%
MVGDJTR	MVIS Global Junior Gold Miners	Materials	08/31/09	12/31/03	-17.7%	4.3%	-17.4%	-0.5%	13.4%	42.3%	-22.4%
BDATATR	BlueStar Big Data & Analytics	Next Gen Software	03/09/21	12/31/15	1.8%	11.8%	0.3%	31.2%	35.7%	33.4%	-15.3%
BAINTR	* BlueStar Artificial Intelligence	Next Gen Software	03/26/18	12/31/12	-0.1%	10.8%	0.1%	18.0%	24.1%	25.0%	-13.6%
BCHNQNTR	* BlueStar China Internet Software	Next Gen Software	08/13/18	06/29/13	-29.5%	-0.6%	5.1%	21.9%	10.7%	32.6%	-21.7%
BQUTMTR	BlueStar Machine Learning and Quantum Computing	NextGen Hardware & Communications	06/07/18	12/18/15	1.0%	6.7%	13.3%	26.0%	28.3%	23.5%	-13.1%
BUQFCNTR	* BlueStar US Machine Learning and Quantum Computing	NextGen Hardware & Communications	03/08/21	12/18/15	-0.2%	7.5%	14.1%	27.0%	31.1%	24.2%	-13.0%
MVSMCTR	MVIS US Listed Semiconductor 10% Capped	NextGen Hardware & Communications	08/13/20	12/31/11	-1.6%	8.7%	11.9%	22.5%	35.8%	24.4%	-16.1%
MVSMHTR	MVIS US Listed Semiconductor 25	NextGen Hardware & Communications	08/12/11	09/29/00	-2.2%	7.7%	11.5%	26.0%	35.9%	25.0%	-15.5%
BGFGNTR	* BlueStar Global 5G Connectivity	NextGen Hardware & Communications	07/26/19	12/15/15	-4.2%	7.8%	4.3%	21.6%	17.1%	20.5%	-11.4%
BFIVGTR	BlueStar 5G Communications	NextGen Hardware & Communications	01/10/19	12/30/16	-4.2%	8.5%	5.0%	18.6%	16.2%	19.9%	-12.8%
BLOGNTR	* BlueStar Global Logistics Benchmark	Thematic Industrials & Infrastructure	10/23/20	12/29/06	3.9%	8.1%	11.4%	6.1%	20.7%	14.6%	-8.4%
BLOGRNTR	* BlueStar Global Logistics	Thematic Industrials & Infrastructure	10/23/20	12/29/06	3.7%	7.2%	12.1%	5.1%	23.5%	14.6%	-7.5%
BECLGNTR	* BlueStar E-Commerce, Payments, and Logistics	Thematic Industrials & Infrastructure	03/01/21	12/29/06	0.3%	7.7%	7.5%	13.0%	27.1%	20.6%	-9.1%
BTOTNTR	* BlueStar Total Security	Thematic Industrials & Infrastructure	07/08/19	12/31/15	-0.9%	7.3%	-0.1%	25.5%	13.4%	22.4%	-14.2%
MVSPCTR	MVIS Global Space Industry	Thematic Industrials & Infrastructure	08/31/21	12/31/19	-1.2%	9.2%	17.2%	26.6%			
MVMVATR	MVIS Australia A-REITs (AUD)	Thematic REITs	12/21/12	12/29/06	4.6%	8.7%	-0.9%	13.7%	8.4%	27.3%	-35.6%
BDLRTNTR	* BlueStar Data Center and Logistics Real Estate	Thematic REITs	08/05/19	12/31/13	-1.4%	11.4%	-0.4%	4.9%	19.6%	15.0%	-7.5%
MVMORTTR	MVIS US Mortgage REITs	Thematic REITs	08/04/11	12/30/04	-3.2%	6.0%	12.8%	25.0%	-1.8%	39.9%	-56.2%
BUORTTR	BlueStar Top 10 US Office REITs	Thematic REITs	08/24/21	12/31/15	-3.3%	8.1%	8.6%	16.8%	0.1%	27.3%	-21.8%

Source: MV Index Solutions. Total Return Indices, *Net Total Return Indices

New Index Launches

MVFOFTR	MVIS Global Future of Food	Consumer Trends	The Index tracks the performance of the largest and most liquid companies offering products and services related to meat and dairy alternatives, organic foods, food flavors, or innovative agriculture technologies. MVFOF covers at least 90% of the investable universe and adheres to ESG criteria.
BBIDSTR	BlueStar Global E-Brokers and Digital Capital Markets	Financials 2.0	The Index tracks the performance of the largest and most liquid companies in the global online brokerage industry. This is a modified market cap-weighted index, and only includes companies that generate at least 50% of their revenue from online brokerage.
MVSPCTR	MVIS Global Space Industry	Thematic Industries & Infrastructure	The index tracks the performance of the largest and most liquid companies in the global space industry. This is a modified market cap-weighted index, and only includes companies that generate a majority of their revenue from products and services related to space exploration, rockets and propulsion systems, satellite equipment and communications solutions, or other satellite equipment related services. MVSPC covers at least 90% of the investable universe and adheres to ESG criteria.
BUORTNTR	BlueStar Top 10 US Office REITs	Thematic REITs	The index tracks the performance of the 10 largest and most liquid US exchange-listed REITs in the office space industry. This is a modified market cap-weighted index, and only includes companies that are domiciled, incorporated or headquartered in the United States, listed on a US exchange and denominated in USD, and generate at least 50% of its revenue or real estate asset value from office buildings located in the US.

Licensed Product News

As of Q3 2021, total thematic products licensed stands at \$19bn USD. We are excited to welcome our newest products licensed in Q3 2021.

MVREMX	MVIS Global Rare Earth/Strategic Metals	29 September 2021
BBIDS	BlueStar Global E-Brokers and Digital Capital Markets Index	22 September 2021
BETOR	BlueStar Europe Travel and Vacation Index	27 July 2021
MVESPO	MVIS Global Video Gaming & eSports Index	16 July 2021
BDATA	BlueStar Big Data & Analytics Index	14 July 2021
MVSMH	MVIS US Listed Semiconductor 25 Index	30 June 2021



The Future of Food

Thematic Spotlight

Food and agriculture have always been cornerstones of economic and social progress. Today, we continue to contend with the challenge of sustaining a growing world population while also catering to changing consumer preferences. Harnessing new technology and innovations, the food and agriculture industries are adapting.

For example, the Millennial generation and Gen Z, in general, are more conscious of the impact of the foods they consume both on their own bodies and on the environment. A growing percentage of the population lean toward a vegetarian or vegan lifestyle but with that, comes nutritional concerns as avoiding meat, dairy, and eggs can lead to a lack of important nutrients and lower protein.

Furthermore, new technologies in the field of agriculture has allowed us to feed a growing world population by increasing agricultural efficiency or facilitating the farming of fruits and vegetables either closer to the end consumer or in geographies that were previously deemed inarable.

The [MVIS Global Future of Food Index \(ticker: MVFOFTR\)](#) captures the leading companies that provide innovative solutions to these challenges such as plant-based meat and dairy alternatives, precision agriculture and agriculture robotics, urban farming equipment, natural food flavors and active ingredients, organic and health food manufacturers, and other food manufacturers that adheres to high ESG standards.

This index seeks to capture companies that will benefit from providing solutions to real world problems and that adapt to changing consumer preferences. It also only accepts those companies that do not violate basic ESG principles and rewards companies that display best-in-class characteristics in the areas of food waste, agricultural climate change, and food safety.

To learn more about MVIS's extended family of innovative indices, please visit www.mvis-indices.com and sign up to join the conversation.

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MV Index Solutions GmbH

Frankfurt Office
Kreuznacher Str. 301350
DE-60486 Frankfurt am Main
+49 (69) 4056 695 55

New York Office
Avenue of the Americas, FL 4
New York, NY 10019

(646) 380 2500