

Monthly Tech Megatrend Market Report

November 2022

HANetf & GinsGlobal

HAN-GINS Tech Megatrends UCITS ETF

ITEK

59bps

IE00BDDRF700

Product Inception Date: 05/10/2018

For Professional Clients Only. Capital at risk.

All data as of 31/10/22

This report was written by, and is the opinion of, the ITEK index providers GinsGlobal.

Key Takeaways¹

- US inflation lower in October – helpful for Megatrend holdings to be revalued higher.
- Big Tech will benefit from weaker US\$ - likely going forward as US inflation subsides.
- **Online Gaming** likely to dominate Digital Entertainment. Gaming 4X Hollywood size already.
- Largest Tech deal in 2022 (Microsoft-Activision), based on **Gaming, Cloud & Mobile** convergence. (See Chart-Social Gaming)
- Onshoring trend away from China - positive for Robotics & Factory Automation subtheme.
- **Social Media** platforms have revenue opportunities beyond digital ads - gaming a major new area.
- Rise of TikTok and short-form video content. Instagram and Twitter important for B2B businesses.
- **California & US government banning sale of non EV cars from 2035** - fast-tracking EV adoption across US.
- Global **Cybersecurity** Spending to Exceed \$1.8 Trillion From 2021-2025
- 18% of 500 CEOs surveyed by KPMG in 2021 say cybersecurity risk is greatest threat.
- Google investing \$10bn+ over the next 5 years in cybersecurity.
- SaaS Software as a Service continuing to receive ~50% of Cloud spending.
- **Cheaper Tech stocks** – expect more M&A activity in 2022-23 due to lower PE multiples.

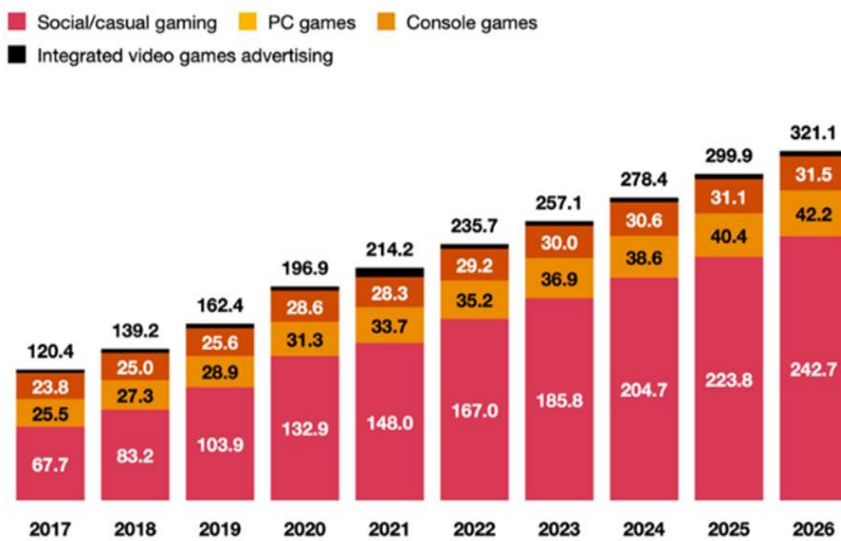
Macro Outlook

- ITEK's **equal weight (112 holdings)** reduces volatility. Underweight FAANGS; Nasdaq 6X more MegaCap exposure.
- Broader disruptive tech holdings than traditional Tech Fund – 8 equal weight subthemes.
- **Best Subtheme contributors** this month – Genomics (9.5%), Robotics (6.9%) & Cloud (5.1%).
- ITEK holdings have far lower overall P/E, Price/Book and Price/Sales ratios versus Nasdaq.
- ITEK top holding less concentrated than many Tech funds – Top 5 holdings (6.3%); Top 10 (12.1%).
- September rebalance and Genomics performance – largest subtheme at 14.9%;
- ITEK does not follow GICS classification – so includes EVs, Online Gaming & Streaming companies (excluded by Tech sector).
- ITEK holds top 15 established players in each subtheme. (all profitable)
- **Global mix:** US 63.4%, China 10.6%, Japan 6.1%, South Korea 2.8% & Sweden 2.9%. (Nasdaq 100% US only.)

¹ Sources available upon request.

Source of all data: GINS Global / Bloomberg as of 30/09/2022. Please note that all performance figures are showing net data. Past performance is not indicative of future performance and when you invest in ETFs, your capital is at risk.

Total global video games revenue, by segment (US\$bn)



Note: 2021 is the latest available data. 2022–2026 values are forecasts.
Source: PwC's Global Entertainment & Media Outlook 2022–2026, Omdia

For illustrative purposes only. Chart includes expected figures for 2022-2026. Past performance is not indicative of future performance.

Subtheme Returns - October

Contribution	Total Return (%)	% Average Weight	% Performance of category
Blockchain	-0.12	12.39	-0.97
Robotics & Automation	0.91	13.25	6.87
Genomics	1.37	14.41	9.51
Cyber Security	0.39	13.03	2.99
Future Cars	0.13	13.14	0.99
Digital Entertainment	-0.27	13.22	-2.04
Cloud Computing	0.67	13.21	5.07
Social Media	-0.62	6.96	-8.91

Source of all data: Solactive. Past performance is no guarantee of future performance.

Largest Contributors - October

HOLDINGS	Index Category	Average Weight (%)	Total Return (%)	Contribution to Return (%)
SAMSUNG SDI CO LTD	Future Cars	1.0	35.7	0.3
APPLIED BLOCKCHAIN INC	Blockchain	0.9	32.4	0.3
INTUITIVE SURGICAL INC	Robotics & Automation	1.0	31.5	0.3
ORACLE CORP	Cloud Computing	0.9	28.5	0.2
HUT 8 MINING CORP	Blockchain	1.0	25.3	0.2
DARKTRACE PLC	Cyber Security	0.6	25.0	0.1
ROBLOX CORP -CLASS A	Digital Entertainment	1.0	24.8	0.2
LG ENERGY SOLUTION	Future Cars	1.0	24.4	0.2
NETFLIX INC	Digital Entertainment	1.1	24.0	0.3
SANGFOR TECHNOLOGIES	Cyber Security	1.0	22.7	0.2
TWITTER INC	Social Media	1.3	22.5	0.3
MARATHON DIGITAL HOLDINGS	Blockchain	1.1	22.4	0.2
BEIGENE LTD	Genomics	0.9	22.2	0.2
HEWLETT PACKARD	Cloud Computing	1.0	19.1	0.2
GENMAB A/S	Genomics	1.0	18.9	0.2
ROCKWELL AUTOMATION	Robotics & Automation	1.0	18.7	0.2
EVOLUTION AB	Digital Entertainment	1.0	17.0	0.2

Source of all data: Solactive. Past performance is no guarantee of future performance.

Tech Megatrends Performance

As of 31.10.22

	1M	3M	6M	YTD	12M	2Y	3Y	SI
HAN-GINS Tech Megatrends UCITS ETF	2.51%	-13.47%	-18.34%	-41.76%	-46.48%	-21.42%	10.22%	17.25%
<i>Solactive Innovative Technologies Index (NTR)</i>	2.55%	-13.44%	-18.23%	-42.08%	-46.73%	-21.47%	10.71%	18.45%

Please note that all performance figures are showing net data. Source: Bloomberg / HANetf. Data as of 31/10/2022. Performance before inception is based on back tested data. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance. Past performance for the index is in USD. Past performance is not an indicator for future results and should not be the sole factor of consideration when selecting a product. Investors should read the prospectus of the Issuer ("Prospectus") before investing and should refer to the section of the Prospectus entitled 'Risk Factors' for

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* The SFDR classifications for the funds are documented in their respective supplements and approved by the Central Bank of Ireland. The supplement for each fund can be found on their respective product page.

Product Details

HAN-GINS Tech Megatrend Equal Weight UCITS ETF (ITEK) is a UCITS compliant ETF domiciled in Ireland. ITEK tracks the Solactive Innovative Technologies Index (Net Total Return), an index of leading companies that are driving innovation in sectors including Robotics & Automation, Cloud Computing & Big Data, Cyber Security, Future Cars, Genomics, Social Media, Blockchain and Augmented & Virtual Reality.

The Solactive Index is managed according to a published, rules-based methodology. It is designed to measure the performance of an investable universe of publicly-traded companies that are involved in innovative and disruptive technological trends across a broad range of industries mentioned. To be included, companies must derive a majority of revenue from one of these themes.

Please remember that the value of your investment may go down as well as up and past performance is no indication of future performance.

Visit the [ITEK Fund Page](#) for more information.

Exchange	BBG Code	RIC	ISIN	Valoren	SEDOL	Currency	TER
London Stock Exchange	ITEK LN	ITEK.L	IE00BDDRF700	-	BYVJ8Y3	USD	0.59%
London Stock Exchange	ITEP LN	ITEP.L	IE00BDDRF700	-	BYVJ9D9	GBP	0.59%
Borsa Italiana	ITEK IM	ITEK.MI	IE00BDDRF700	-	BFX1C86	EUR	0.59%
Deutsche Boerse Xetra	T3KE GY	T3KE.DE	IE00BDDRF700	-	BFX38M8	EUR	0.59%
SIX Swiss Exchange	ITEK SW	ITEK.S	IE00BDDRF700	43915667	BMYC3Q2	CHF	0.59%



Anthony Ginsberg, GinsGlobal Index Funds

Anthony Ginsberg is the co-creator of the HAN-GINS Tech Megatrend UCITS ETF (ITEK), enabling investors to gain exposure to the eight leading subthemes driving the Fourth Industrial Revolution, across Developed and Emerging markets. ITEK tracks a rules-based index that equally weights these eight subthemes, including cybersecurity, social media, future cars to digital entertainment, gene editing and robotics.

Anthony Ginsberg is the Managing Director of GinsGlobal Investment Management, a global asset management company offering a broad range of innovative index-linked products, for both retail and institutional investors. GinsGlobal designs index products for a number of leading financial institutions, including global insurers, banks and asset managers. GinsGlobal was founded in 2000 and has operations in North America, Africa, Middle East and Asia-Pacific.

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 - ii. the carbon securities ETCs under the terms in the base prospectus approved by the UK Financial Conduct Authority (“FCA”) and the relevant final terms of the carbon securities (together, “FCA Carbon ETC Prospectus”); and
 - iii. the carbon securities ETCs under the terms in the base prospectus approved by the Central Bank of Ireland (“CBI”) and the final terms of the carbon securities (together, “CBI Carbon ETC Prospectus”).

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The ETF Prospectus, Metals ETC Prospectus, FCA Carbon ETC Prospectus, CBI Carbon ETC Prospectus and Cryptocurrency Prospectus can all be downloaded from www.hanetf.com.

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