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WisdomTree Europe

Investing in the World's Future: The Efficient Use of Multi Thematics

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January 2024

Investing in the world's future The efficient use of Multi Thematics





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1.

Thematics: Investing
in the world's future





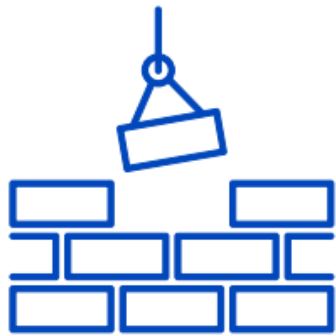
Thematic investing offers a forward-looking perspective, aligning investment strategies with emerging trends and structural tailwinds and, therefore, providing the potential for higher long-term growth.



Thematics link big ideas to investments

- + Looking back, it is possible to link major themes over time with the emergence of giant companies.
- + Thematics provide a direct link between drivers of long-term growth and portfolio construction.

Some megatrends over the last century



1930/40s

WWII and rebuilding



1950/60s

Baby boom



1970/80s

Rise of Japan



1990/00s

Internet & eCommerce

Thematics signpost tomorrow's megacaps

The world mega caps over the last few decades

	1980	1990	2000	2010	2020	2030
1	IBM	Nippon T&T	Microsoft	Petrochina	Microsoft	
2	AT&T	Bank of Tokyo-Mitsubishi	General Electric	Exxon Mobil	Apple	
3	Exxon	Industrial Bank of Japan	NTT DoCoMo	Microsoft	Amazon	
4	Standard Oil	Sumitomo Mitsui Banking	Cisco	ICBC	Google	
5	Schlumberger	Toyota	Wal-Mart	Wal-Mart	Facebook	Which company is on its way to the top 10 ?
6	Shell	Fuji Bank	Intel	China Construction Bank	Alibaba	
7	Mobil	Dai-Ichi Kangyo Bank	Nippon T&T	BHP Billiton	Tencent	
8	Atlantic Richfield	IBM	Exxon Mobil	HSBC	Johnson & Johnson	
9	General Electric	UFJ Bank	Lucent Technologies	Petrobras	JP Morgan Chase	
10	Eastman Kodak	Exxon	Deutsche Telekom	Apple	Exxon Mobil	

- + From one decade to the next, only 2 or 3 companies remain in the top 10 biggest companies in the world.
- + The most important themes of the previous decade are creating new mega caps and destroying old ones (Japan in the 80s, Internet in the 2010s).
- + Performance-wise, there is a huge difference between a company on its way to dominance and one that has achieved dominance.

Annualised performance of Nvidia since its IPO compared to more established mega caps

	Nvidia	Walmart	Amazon	Microsoft
Annualised Returns	36.0%	7.7%	17.3%	11.3%

Sources: WisdomTree, Bloomberg. From 21/01/1999 to 30/06/2023 In USD. Historical performance is not an indication of future performance and any investments may go down in value.

Thematics help to home in on the stocks with highest potential



4%

Only 4% of all US stocks account for the entire wealth creation of the US stock market over the past 90 years.

How to interpret those results ?

- + Passive-minded investors tend to use it to underscore the challenges of stock picking and interpret it as a reason to invest index-linked strategy like a Nasdaq ETF for example.
- + Active-minded investors tend to use it to defend very concentrated portfolios aiming to invest only in the 4% of winners' stocks. An impossible task...

1.3%

Only 1.3% of firms account for the \$US 44.7 trillion in global stock market wealth creation from 1990 to 2018.

WisdomTree's approach is to use themes as a sieve to narrow the investment universe but keep a concentrated approach to allow for selection error.

Thematic investing can be useful for narrowing down the full investable universe to a smaller list of companies with an above-average likelihood to beat risk-free assets.

Source: (Bessembinder, Do Stocks Outperform Treasury Bills?, 2018) and (Bessembinder, Chen, Choi, & Wei, 2019)

Thematics are a source of diversification



Decorrelation is driven by 3 factors

+ Industry and sector:

Themes can have a tilt to specific industries, sectors or regions.



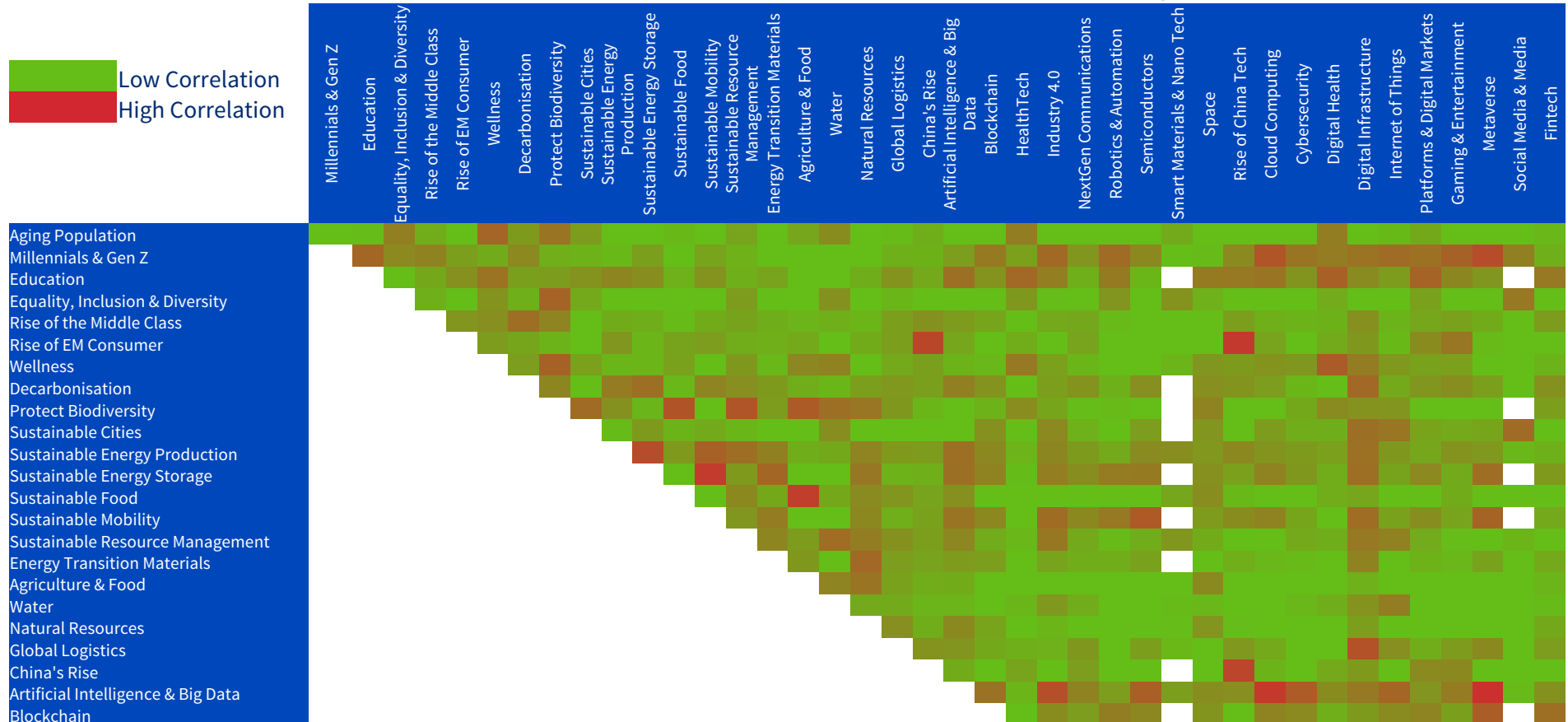
+ Unique driving factors:

Themes are driven by theme-specific technological innovations, regulatory changes or societal trends.

+ Unique time horizons

Each theme sits at a different degree of adoption at any given time.

Correlation matrix of themes excess returns (vs MSCI All Country World)



Sources: WisdomTree, Morningstar, Bloomberg. From December 1999 to June 2023. Returns are calculated in US dollars on a monthly basis. The correlation is calculated only when returns are available from both themes in the considered pair for at least 12 months. Historical performance is not an indication of future performance and any investments may go down in value.

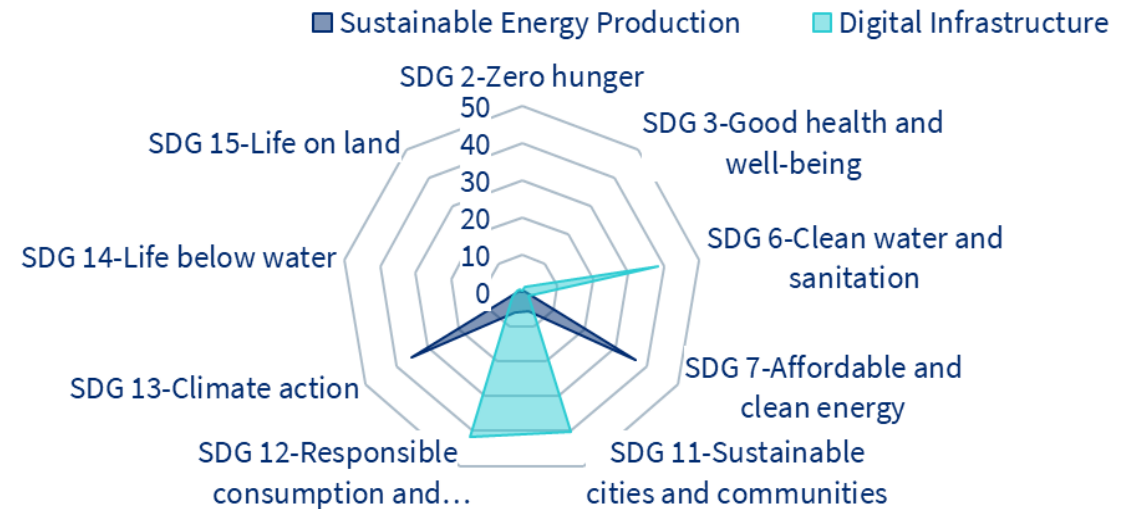
United Nations Sustainable Development Goals (SDGs) will benefit from structural tailwinds over time



Thematic investing allows investors to construct portfolios with companies aligned with the United Nations' 17 SDGs and benefit from structural tailwinds for the long term as they benefit from the following:

- + Concerted efforts and investment from governments aligned to such goals as tackling climate change, reducing inequality, improving education standards and so on.
- + Consistent investment demand from investors, especially in the Western world, who are keen to make investments which align with their morals.
- + Clear regulatory advantages, as regulatory bodies have been trying to steer investors towards 'truly' SDG-aligned companies.

Revenue exposure to SDGs for two themes



Sources: WisdomTree, FactSet, Sustainalytics as of 30/06/2023.

Thematics are aligned with structural tailwinds like SDGs





2.

A one-stop solution to capture the world's future growth potential



How to access the structural growth potential of thematic ?

When considering thematic investments, investors can choose between:

Single Thematic Strategies

Investors can select the theme they are most convinced by and the timing of their investment.

Multi Thematic Strategies

Investors can simplify their investment experience by delegating the decisions around the selection of the most relevant themes, the capital allocation amongst themes and the stock selection.

The pitfalls of a bottom-up approach to multi-thematic

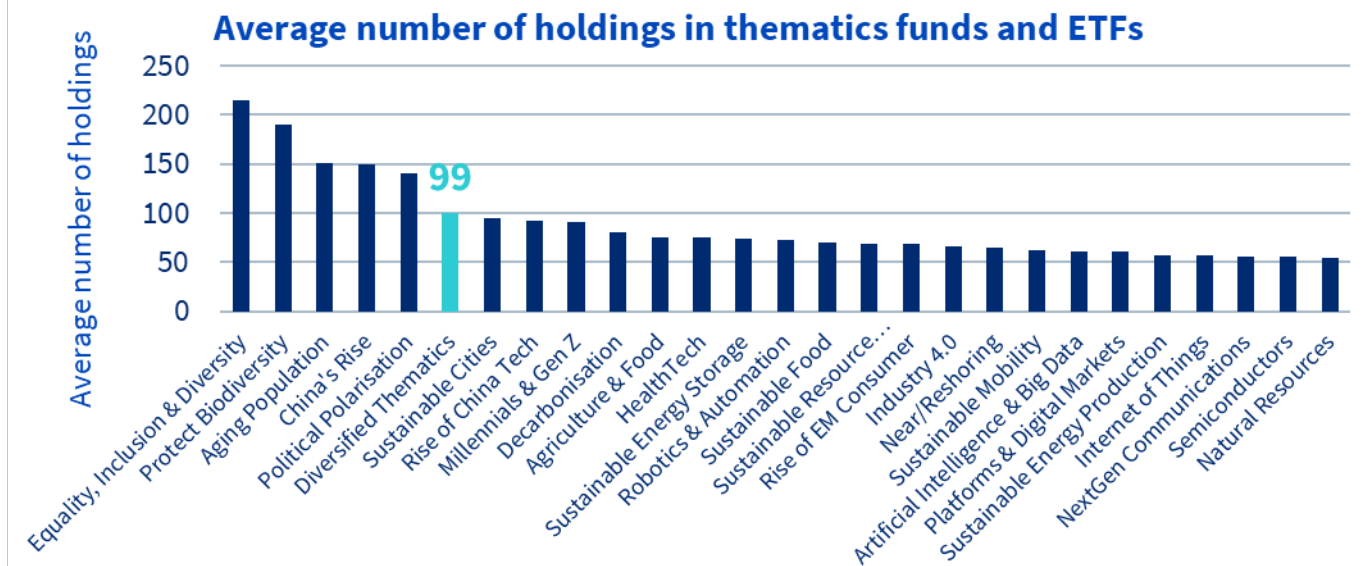
When using a concentrated, bottom-up approach managers have to pick their poison

- **A lack of exposure to pure players**

Portfolio is built with mega-caps covering multiple themes simultaneously resulting in Nasdaq like exposure.

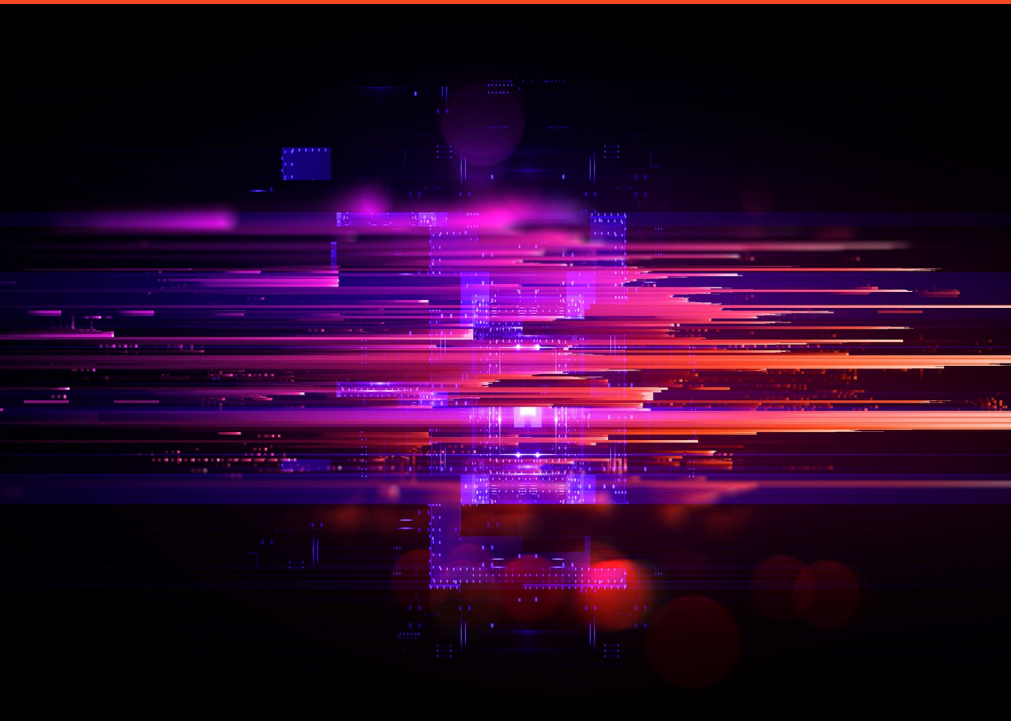
- **A risk of missing the long-term winners**

Less than 10 stocks can be used for each theme, leading to impossible choices between high potential companies. This increases the risk of missing out on the next Amazon-like opportunity.



Sources: WisdomTree, Morningstar as of 30/06/2023. Historical performance is not an indication of future performance and any investments may go down in value.

Most existing, active
Multi-thematic are
too concentrated



The asymmetric nature of equity markets makes missing the future winners the cardinal sin of investing

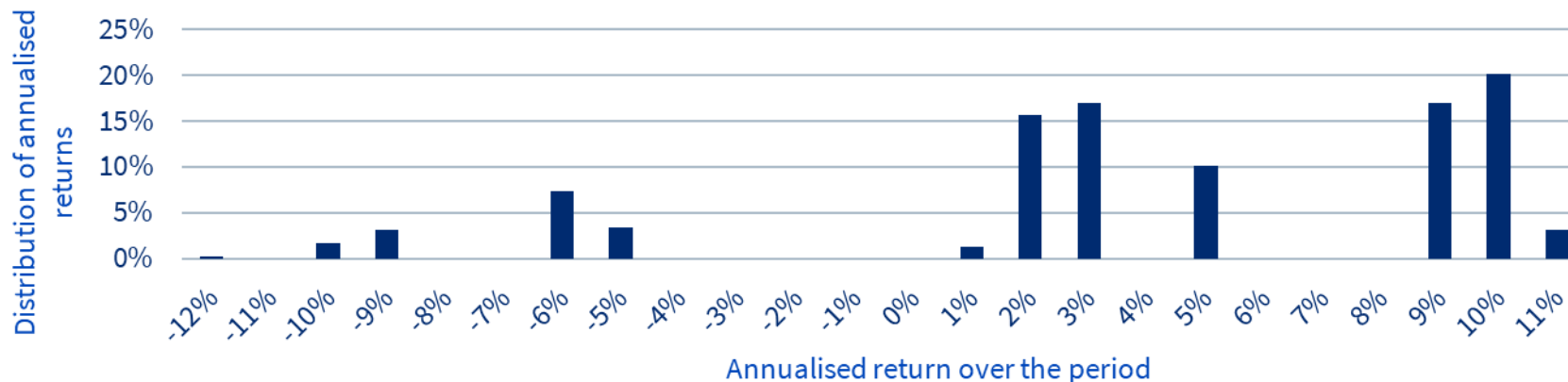
Learning from the past: A look at the development of the internet theme

Let's take the example of the internet theme and how investors could have tried to benefit from it as early as 1998. We test two different approaches:

- + investing in an equal weighted portfolio of the ten biggest dot-com stocks.
- + investing in a more concentrated portfolio of 5 stocks selected among those 10 to try to remove the duds.

Results show that the 10-stock portfolios (+9.4% per annum) beat the S&P 500 (+7.4%). Only 40% of the 5-stock portfolios beat the S&P 500. All of them owned Amazon. None of the portfolios without Amazon beat the market.

Distribution of annualised returns since December 1998 for all possible portfolios of five stocks



Sources: WisdomTree, Bloomberg. From December 1998 to June 2023. In USD. Historical performance is not an indication of future performance and any investments may go down in value.

When investing in Thematics, finding the next Amazon is more important than avoiding the next Yahoos.



WisdomTree

A diversified top-down approach allows for more differentiated portfolios and higher growth potential



Top-Down Approach

The portfolio is built around some selection and weighting of themes first. Stocks are then selected theme by theme with a focus on pure players.

In the graph, we simulate a top-down portfolios as portfolios of 5 themes. We construct 10,000 random portfolios that invest every quarter in five randomly selected themes. The performance of each investment theme is calculated using the methodology described in the appendix.

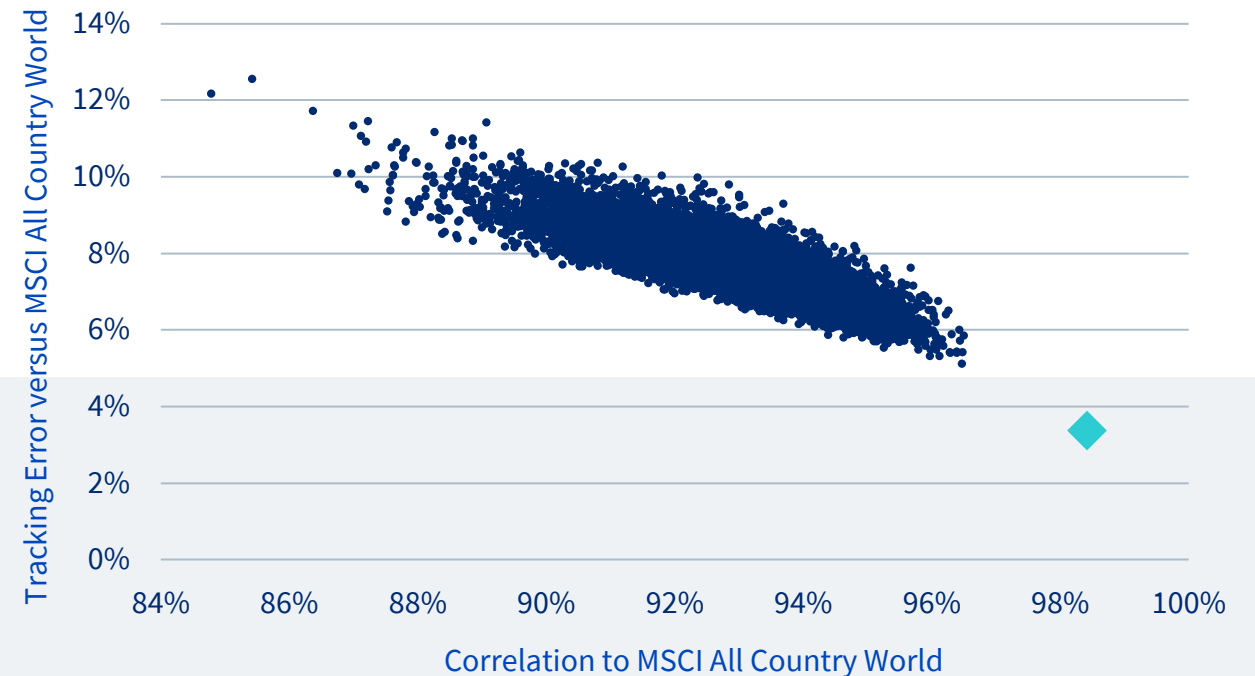
Bottom-Up Approach

The portfolio is built based on the merits of the stocks themselves based on their exposure to Megatrends in general. It may lead to the selection of all-rounder companies with their fingers in many pies.

In the graph, we simulate bottom-up portfolios as the average historical performance of all funds classified in the Diversified Thematics cluster.

Sources: WisdomTree, Morningstar, Bloomberg. From December 1999 to June 2023. Returns are calculated in US dollars on a quarterly basis. This graph represents the volatility and tracking error of 10,000 simulated portfolios. Each simulated portfolio randomly picks five investment themes (across three clusters—Social & Demographic Shifts, Technological Shifts and Environmental Pressures) every quarter. The monthly performance of each simulated portfolio is calculated as the average of each of the five themes' monthly performance. The monthly performance of each investment theme is calculated as the average monthly performance of every Europe-domiciled fund live at that point in time and classified in the theme. Historical performance is not an indication of future performance and any investments may go down in value.

A top-down approach would offer less correlated returns and have a higher tracking error vs the MSCI All Country World Index than a bottom-up approach



- 10000 Monte Carlo simulations of 5 Themes Portfolio
- ◆ Diversified Thematics

Thematic Stock Selection

It is harder that it looks

Thematic stock selection

It is not only about which company is better it is about which company has beta to the theme

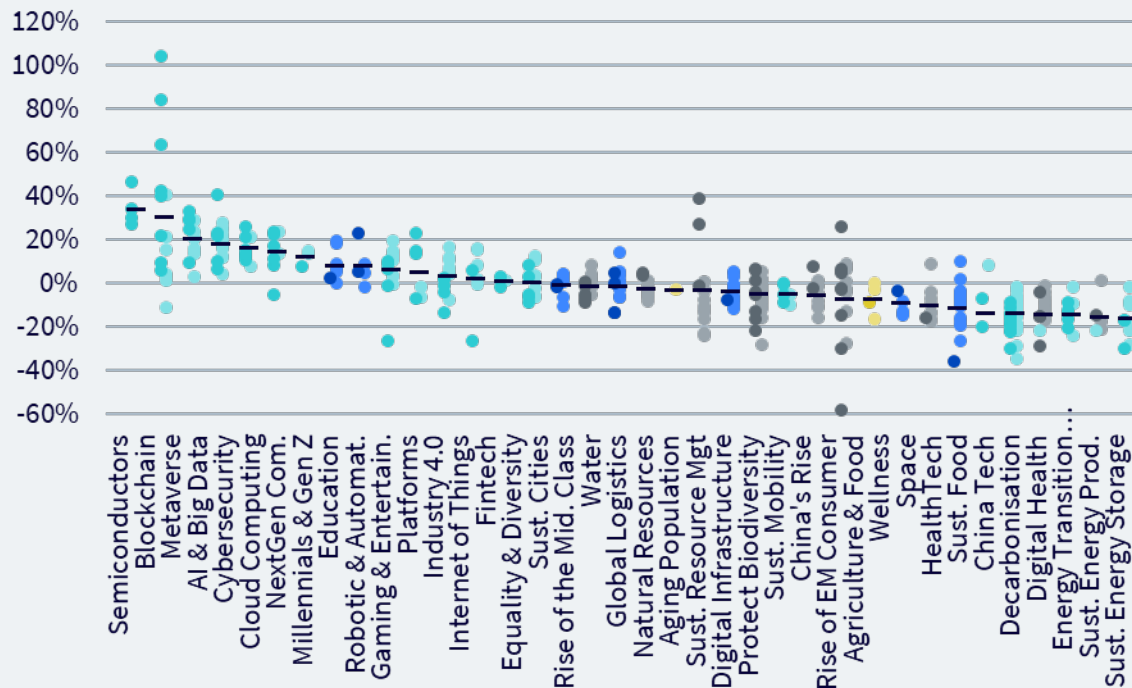


Performance dispersion between strategies aiming to harness the same themes is very high. As discussed in (Debru & Kuramshina, April 2021)¹, It is the result of a large dispersion of holdings between strategies.

The opportunity cost of picking the wrong thematic fund, or the wrong thematic stocks is very high.

Identifying the pool of stocks that represent a theme is not what active manager are well equipped for.

Year to Date performance's dispersion strategies across investment themes



1. Debru, P., & Kuramshina, E. (April 2021). [Thematic Universe - How to harness the power of megatrends in your portfolio?](#)

Sources: WisdomTree, Morningstar, Bloomberg. From 31/12/22 to 31/10/2023. Returns are calculated in US dollars on a monthly basis. Only funds live for the whole period and classified in the 14 investment themes above are considered. Historical performance is not an indication of future performance and any investments may go down in value.

A thoughtful strategy design is necessary to leverage the potential of thematic investment in a multi thematic portfolio



Amplify the growth potential



Focus on the pivotal themes



Maximise diversification between themes



Benefit from short-term trends in thematics



Leverage theme-specific expertise in the stock selection



Invest in pure play companies



Focus on the rising stars of tomorrow, not the giants of yesteryears



Overconfidence is the cardinal sin: Diversification is the key



3.

An Example: WisdomTree
Global Megatrends Equity
Index



4 layers of alpha generation



01

02

03

Strategic Thematic Asset Allocation	Tactical Thematic Asset Allocation	Thematic Stock Selection
<p>Every year in April, around 15 themes are selected based on qualitative and quantitative indicators, focusing on 3 main criteria:</p> <ul style="list-style-type: none">• Conviction• Diversification Potential• Alignment with the UN Sustainable Development Goals <p>Investors get a curated exposure to the most promising themes at a given time while maximising diversification between themes.</p>	<p>Every Quarter in January, April, July and October, the strategic weighting of each theme is modified by a multiplier ranging from 0.5 to 1.5 based on a proprietary momentum score calculated independently for each theme.</p> <p>The strategy leans in and overweight themes when a combination of positive factors creates a virtuous cycle for a given theme or lean out when necessary.</p>	<p>When available, the portfolio invests in the holdings of the relevant WisdomTree Thematic index for that Theme. If not, the portfolio invests in stocks are selected based on their economic activity related to the relevant theme.</p> <p>WisdomTree ESG criteria are applied across the portfolio.</p> <p>Investors benefit from theme experts who inform the selection of the most relevant companies for each theme. It aims to create a diversified portfolio of stocks representing each theme and its long-term growth potential.</p>

04

Final Momentum Stock Selection
<p>Every quarter, companies with lower momentum scores in each theme are removed so that approximately 600 stocks are selected when combining the holdings from all the themes. The process is applied so that the weights of the different themes are unchanged.</p> <p>Investors benefit from a more concentrated portfolio leaning into the most relevant stocks at a given point in time.</p>

E

Thermal Coal

Exclude all companies which derived more than 5% revenue from thermal coal extraction, or having more than 5% revenue or capacity from thermal coal-based power generation as defined by Sustainalytics

Unconventional Oil & Gas

Exclude all companies which derive more than 5% of their revenue from unconventional oil & gas exploration and/or production such as oil sands, Arctic oil or shale energy as defined by Sustainalytics

WisdomTree Investment Governance

WisdomTree is a Signatory of the United Nations Principles for Responsible Investment (“UNPRI”)

WisdomTree does not engage in securities lending

WisdomTree Europe’s through its investment manager, recognises and adheres to the principle of active ownership and exercising the right to vote on issues submitted to shareholder vote as a way of promoting good ESG policies.

S

Tobacco

Exclude all companies with any involvement or significant ownership except Retail where tobacco represents less than 5% of revenues

Small Arms

Exclude all companies which derive more than 5% of their revenue from activities connected to small arms (Manufacturing, distribution, components)

Controversial Weapons

Exclude all companies with any involvement, or with significant ownership in such companies as defined by Sustainalytics

G

UN Global Compact

Exclude companies found to be non-compliant with the 10 principles on Human Rights, Labour, Environment and Anti-Corruption

The WisdomTree Thematic Classification – The necessary starting point for a multi thematic strategy



DIVERSIFIED THEMATICS							
TECHNOLOGICAL SHIFTS		DEMOGRAPHIC AND SOCIAL SHIFTS		GEOPOLITICAL SHIFTS		ENVIRONMENTAL PRESSURES	
DISRUPTIVE TECHNOLOGIES	HYPER CONNECTIVITY & DIGITALISATION	DEMOGRAPHIC SHIFTS	SOCIAL SHIFTS	GLOBALISATION	MULTI-POLARITY	CLIMATE CHANGE & SUSTAINABILITY	LIMITED RESOURCES
Artificial Intelligence & Big Data	Cloud Computing	Aging Population	Education	Global Logistics	China's Rise	Decarbonisation	Agriculture & Food
Rise of China Tech		Millennials & Gen Z	Equality, Inclusion & Diversity		Political Polarisation	Protect Biodiversity	Natural Resources
Blockchain	Cybersecurity		Rise of the Middle Class		Rise of Tension	Sustainable Mobility	Water
HealthTech	Digital Health		Rise of EM Consumer		Near/Reshoring	Sustainable Energy Production	
Industry 4.0	Digital Infrastructure		Wellness			Sustainable Energy Storage	
Next Gen Communications	Fintech & Digitalisation of Finance					Sustainable Food	
Robotics & Automation	Gaming & Entertainment					Sustainable Cities	
Semiconductors	Internet of Things					Sustainable Resource Management	
Smart Materials & Nano Tech	Metaverse					Extreme Events	
Space	Platforms & Digital Markets					Energy Transition Materials	
	Social Media & Media						

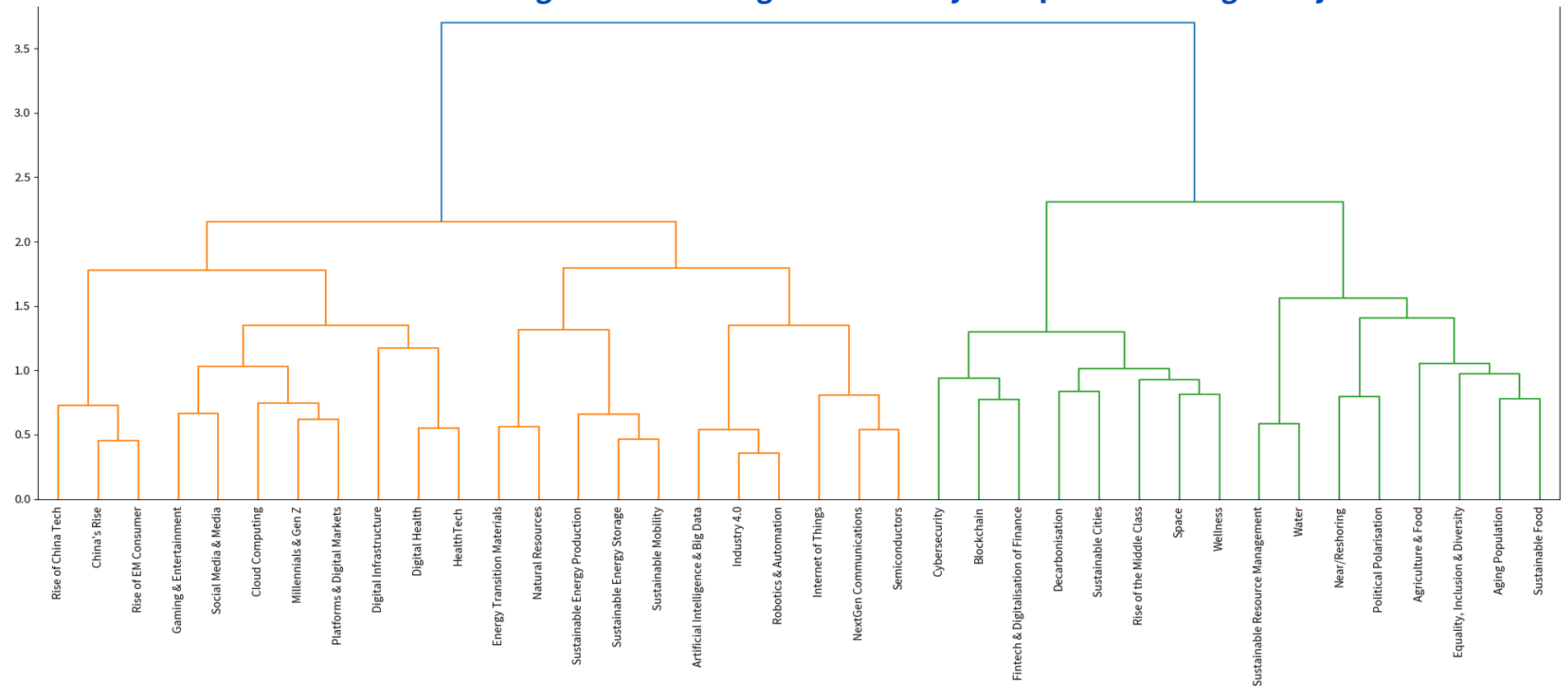
Strategic Thematic Allocation aims to maximise the diversification inside the portfolio



Clustering to maximise diversification

By selecting themes across the tree and not along one branch or two, it is possible to improve diversification significantly.

Hierarchical clustering of themes using the last four years' performance globally



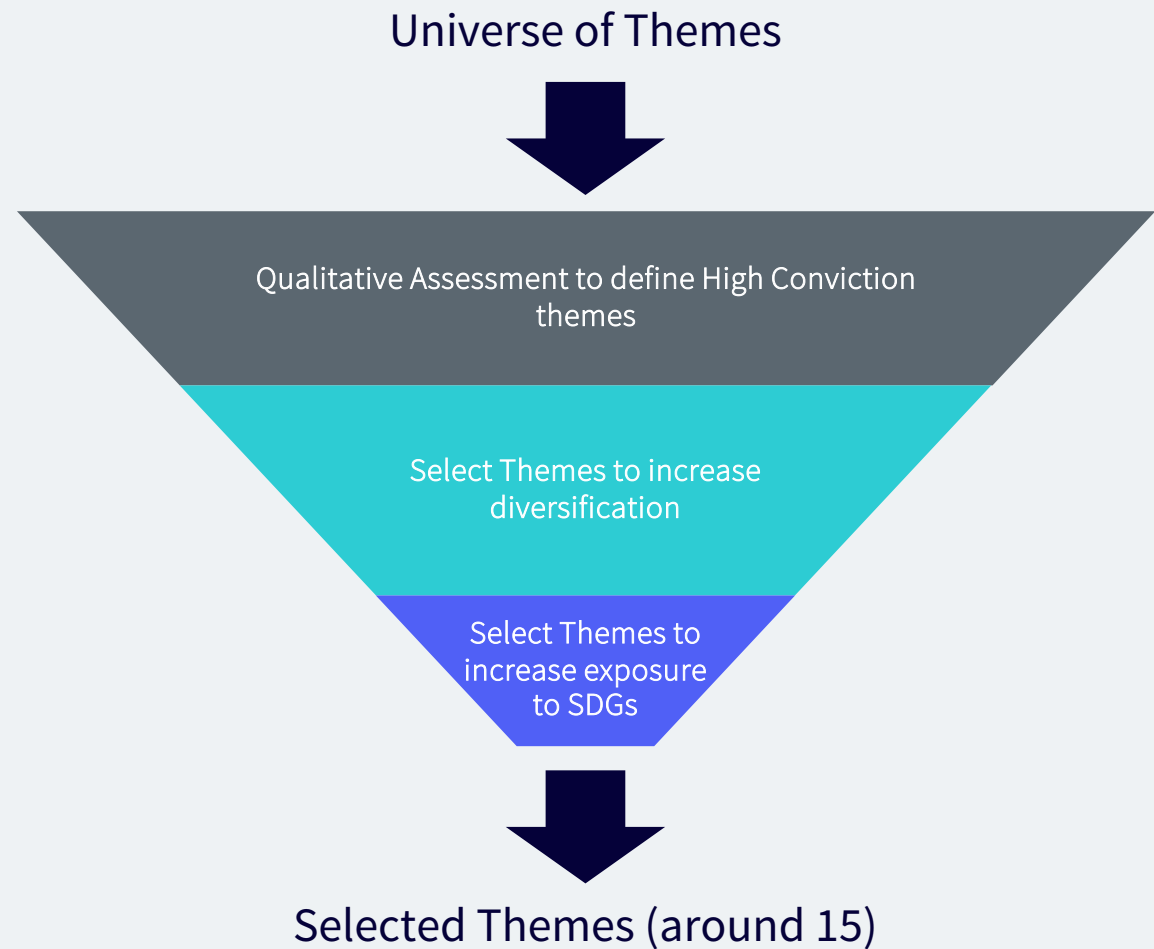
Sources: WisdomTree, Morningstar, Bloomberg. From 01/01/2019 to 30/06/2023. Using monthly data in USD. The monthly performance of each investment theme is calculated as the average monthly performance of every ETF and fund live globally at that point in time and classified in the theme, as explained in the appendix1. Historical performance is not an indication of future performance and any investments may go down in value.

The Strategic Thematic Asset Allocation

Focusing on high conviction and diversified themes

Every year in April, around 15 themes are selected based on qualitative and quantitative indicators, focusing on 3 main criteria:

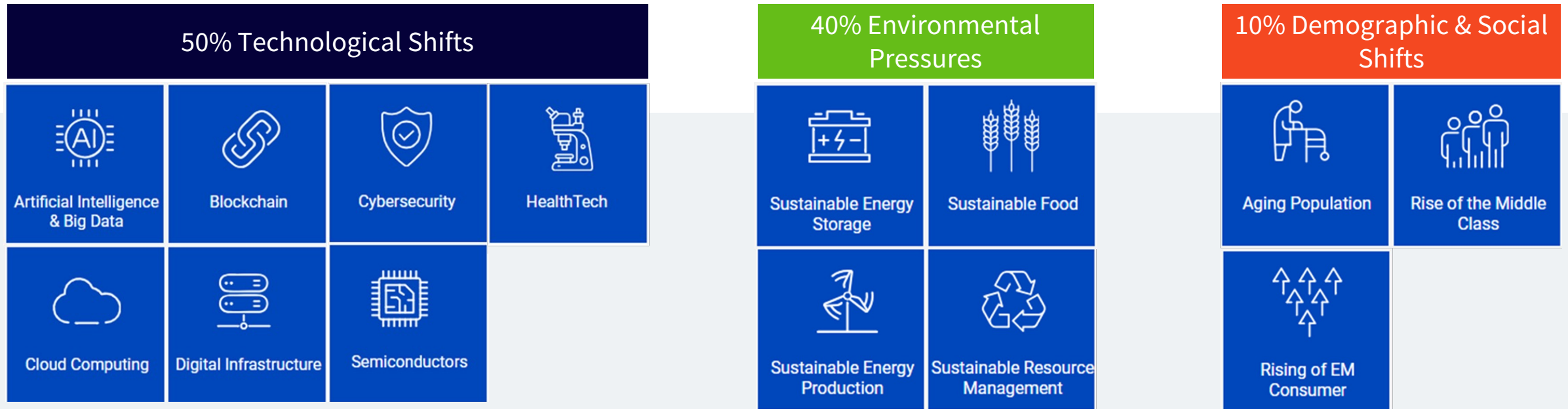
- **Conviction:** High-conviction themes are the themes with greater market size, growth potential and investable universes.
- **Diversification Potential:** Themes are assessed through a combination of hierarchical clustering calculated on the excess returns (vs. global equity benchmark) of each of the themes to assess their diversification potential. The portfolio of themes aim to maximise diversification.
- **Alignment with the UN Sustainable Development Goals (SDGs):** Themes are assessed by looking at the proportion of revenues aligned to the different SDGs for all the stocks in each theme. Themes with differentiated SDG exposure and higher revenue exposure to SDGs are prioritised.



The Strategic Thematic Asset Allocation

Diversification at the core of our Strategic Thematic Asset allocation

- + Cluster weights are reflecting conviction
- + Themes are equal-weighted inside each cluster to increase diversification

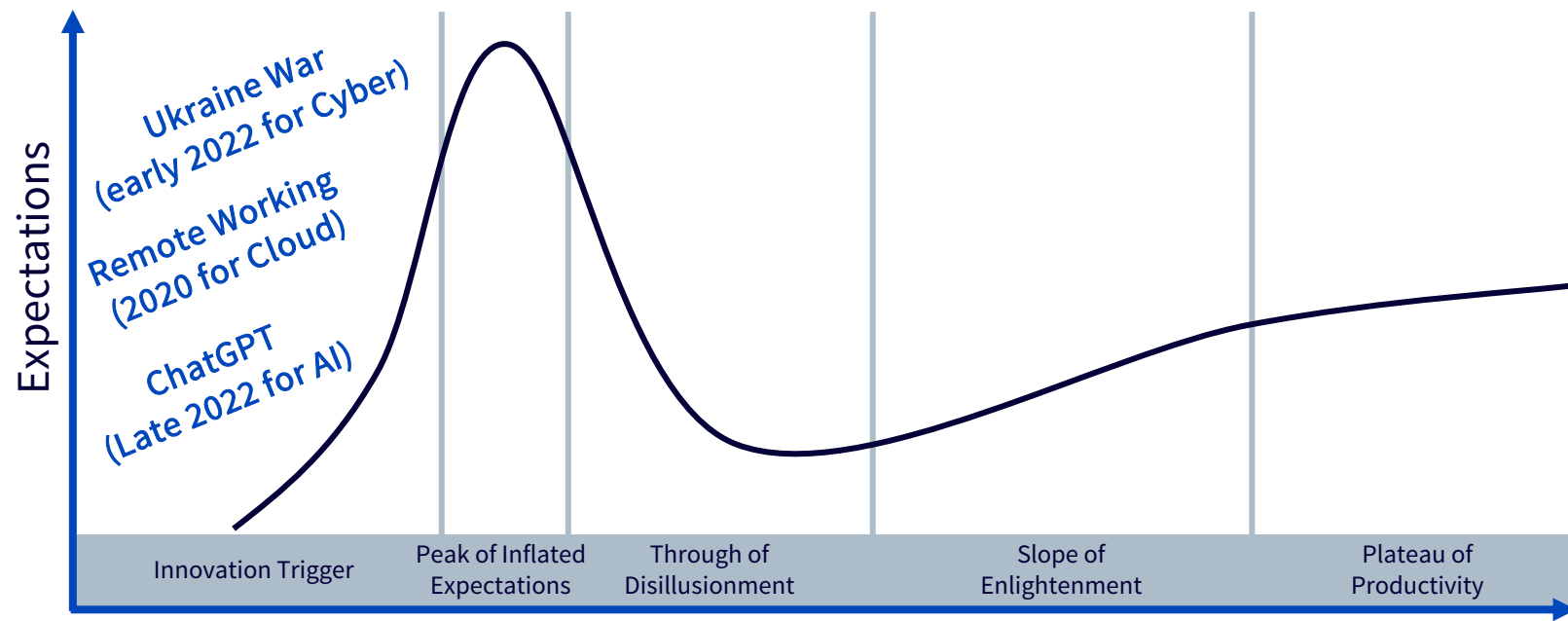


Source: WisdomTree, 30th November 2023

The Tactical Thematic Allocation aims to benefit from short-term trends in themes

The Gartner Hype Cycle

The Gartner Hype Cycle is a helpful conceptual framework to illustrate how the world tends to behave in the face of new technological innovations and, by extension, showcases the different steps in the evolution of a theme.



Source: Gartner



Using Fundamentals to time thematics Good idea?

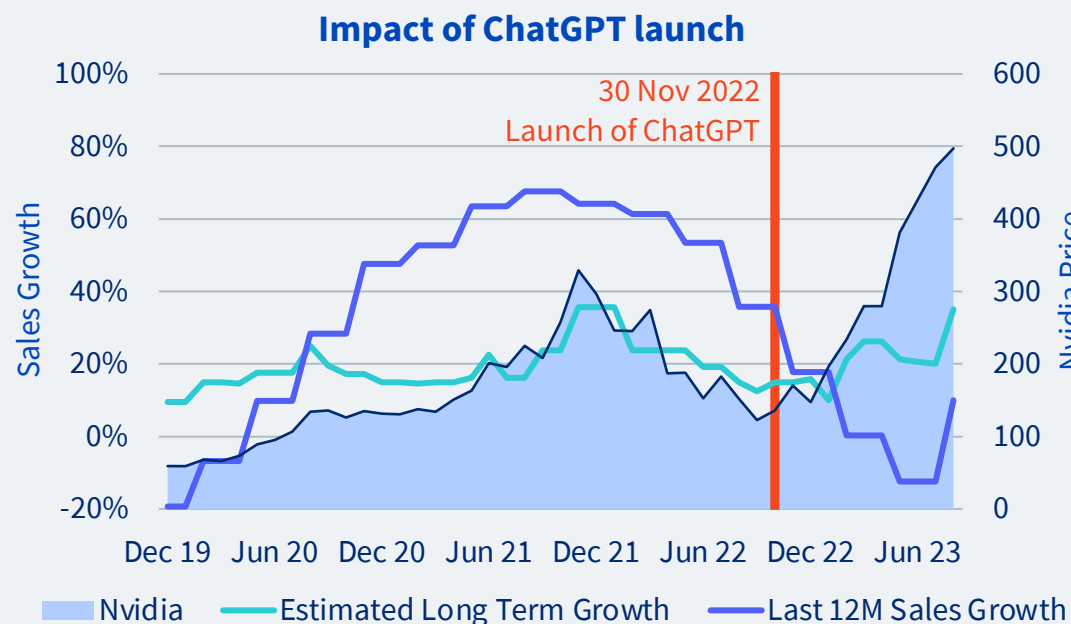
Would fundamentals have given early indication of ChatGPT launch's impact?



The launch of ChatGPT has been the spark for a huge rally in Nvidia (and other AI) stocks.

In November 2022, going by fundamentals such as estimated growth or last 12m growth, Nvidia did not look particularly interesting.

This is one clear example that what triggers a theme to outperform is very often outside the realm of fundamentals.



Sources: WisdomTree, Bloomberg. From December 2023 to August 2023. Returns are calculated in US dollars. Historical performance is not an indication of future performance and any investments may go down in value.

Tactical Thematic Allocation using Momentum Signals

Overweight and underweight of the different themes in the Tactical Thematic Allocation

Theme	Tactical Positioning compared to strategic one (November 2023)	
Artificial Intelligence & Big Data	Overweight	+71%
Blockchain	Overweight	+95%
Cloud Computing	Overweight	+69%
Cybersecurity	Overweight	+79%
Digital Infrastructure	Underweight	-43%
HealthTech	Underweight	-45%
Semiconductors	Overweight	+77%
Sustainable Energy Production	Underweight	-49%
Sustainable Energy Storage	Underweight	-43%
Sustainable Food	Underweight	-47%
Sustainable Resource Management	Underweight	-51%
Aging Population	Underweight	-23%
Rise of EM Consumer	Underweight	-36%
Rise of the Middle Class	Underweight	-21%

Source: WisdomTree as of 30/11/2023. Historical performance is not an indication of future performance and any investments may go down in value.



Momentum signal to tactically weight themes

On Quarterly Rebalancings, we calculate a momentum score based on the relative performance of each theme versus the MSCI All Country World Index

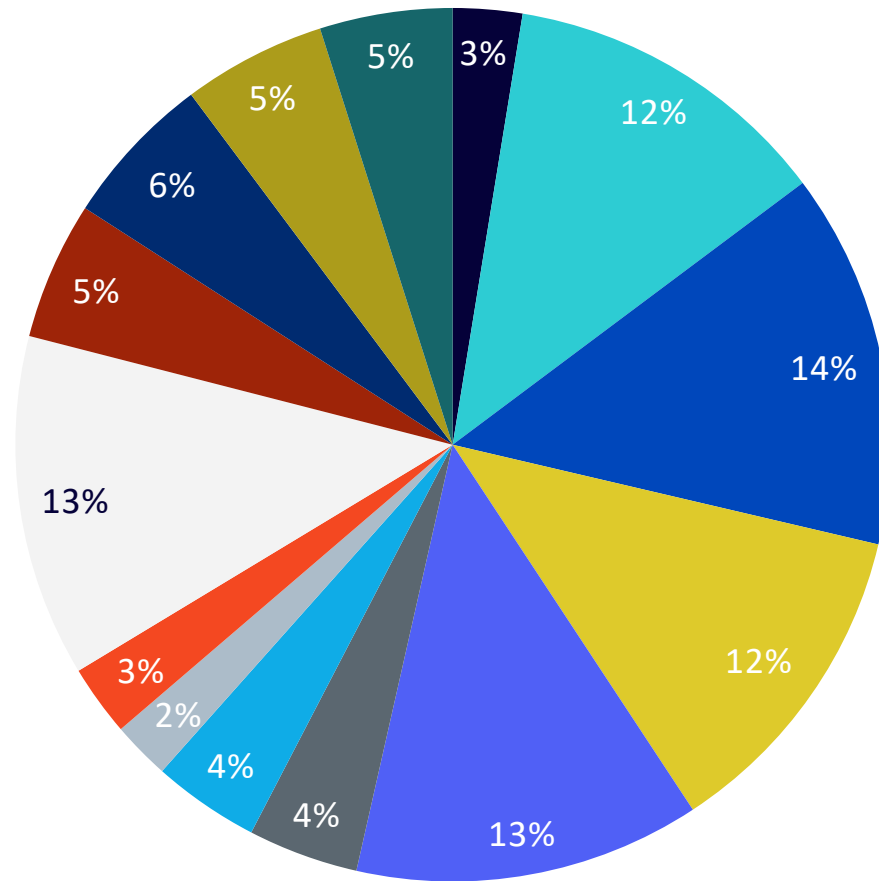
- + When the score is positive, the them gets overweighted
- + When the score is negative, the them gets underweighted

The Tactical Thematic Asset Allocation



Top Down Allocation

Thanks to the top down allocation approach, investors can follow the theme allocation easily.



- Aging Population 2.6%
- Artificial Intelligence & Big Data 12.2%
- Blockchain 13.9%
- Cloud Computing 12.1%
- Cybersecurity 12.8%
- Digital Infrastructure 4.1%
- HealthTech 4.0%
- Rise of EM Consumer 2.1%
- Rise of the Middle Class 2.6%
- Semiconductors 12.7%
- Sustainable Energy Production 5.1%
- Sustainable Energy Storage 5.7%
- Sustainable Food 5.3%
- Sustainable Resource Management 4.9%

Source: WisdomTree. 30th November 2023.

Thematic Stock Selection

Expertise, Pure Play and Diversification of the risk are key



Clarity of Theme

Focused on a well-defined Theme aligned with investor's long-term views. Built to focus on the Theme specifically.



Expertise

Harnesses the necessary expertise to identify the companies which stand to benefit the most from further proliferation of the Theme.



Purity of exposure

Focused on pure players and companies that will benefit the most from the Theme developing.



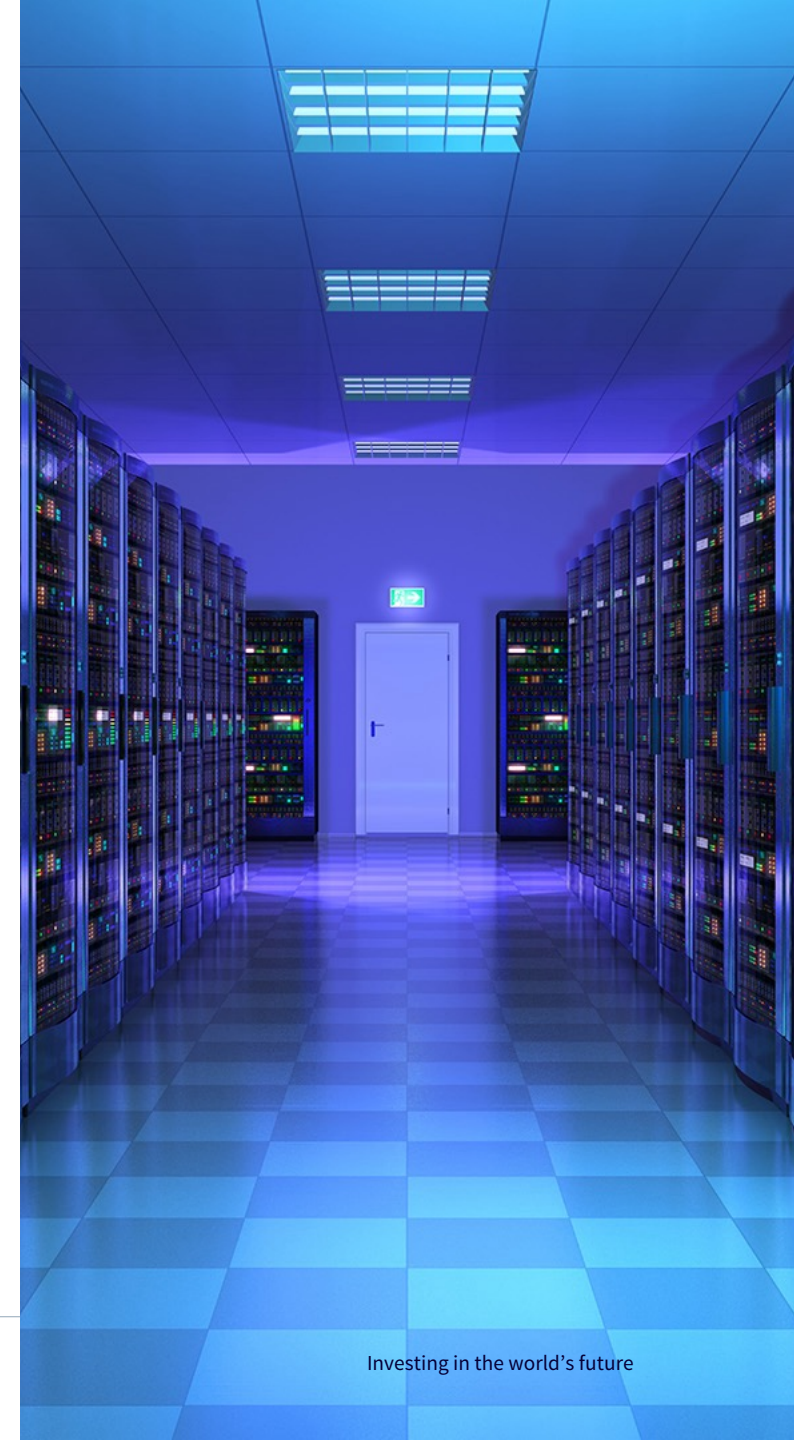
Differentiation

Additive to an investor's existing portfolio. Stands out versus market cap indices and peers.

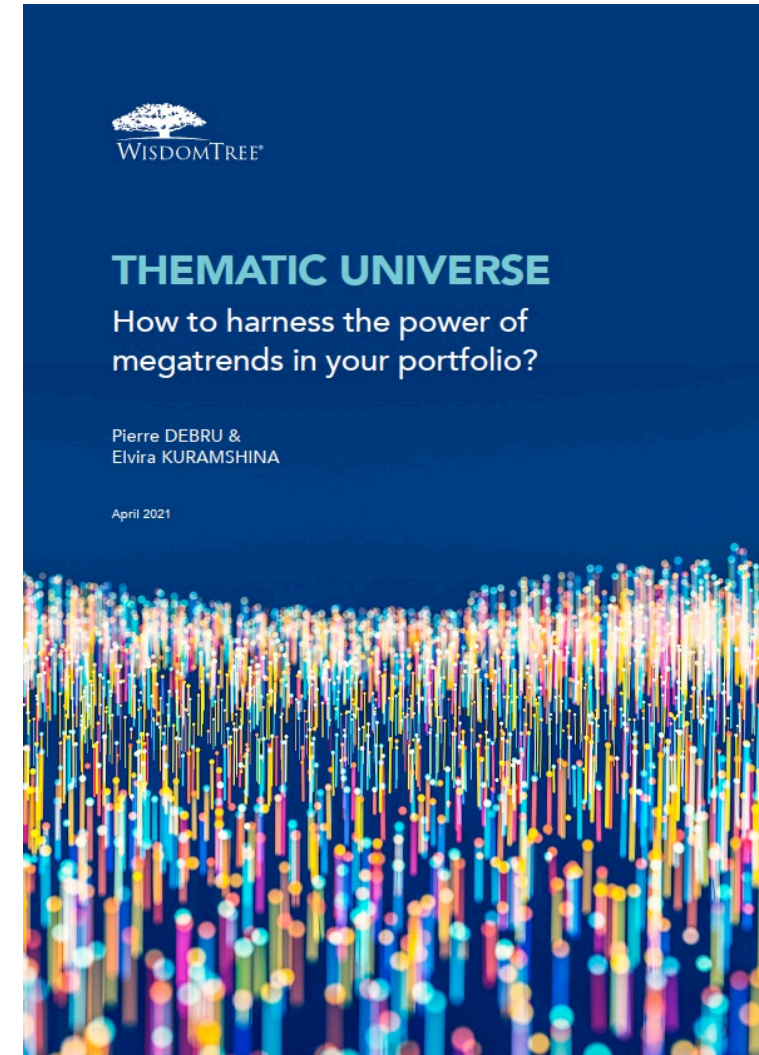


Transparency, Investability & Discipline

Constructed for scalability and liquidity.



To learn more about WisdomTree Approach to Thematics



Questions

+ For more information and insights please visit:

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The educational guide to Exchange Traded Products (ETPs)

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