

Thematic investing set to **transform** asset management?



Discover the views from fund selectors around the world

The survey and research was conducted by Broadridge, a provider of investor communications, technology-driven solutions and data and analytics to the financial services industry.

This research report has been written by Broadridge, a global Fintech leader providing a wide range of solutions for the financial services industry and businesses, including data and analytics solutions for the asset management industry. Broadridge drew on several resources for the analysis.

- Interviews with 90 fund selectors* in Europe, Asia Pacific and North America during Q1 2021, exploring their usage of and views on thematic funds on a qualitative basis.
- Creation of a global dataset of 1,471 thematic funds categorised into 13 thematic segments, capturing trends since 2017.
- Fund Buyer Focus, a rolling market research programme which has been interviewing the 1,200 largest professional fund selector firms in Europe (since 2005) and Asia Pacific (since 2019), and who collectively manage around 75% of accessible third-party fund assets.
- Global Market Intelligence, a dataset that draws together assets, flows and other information on 91,000 global funds, including coverage of 'cross-border' funds.

* Note: Fund selector survey encompasses respondents in retail banking, private banking, insurance groups, financial advisory practices, fund supermarkets, securities firms and fund of funds management.

Foreword

Thematic investing is no longer niche. Assets in these funds have grown at an annual rate of 37% since 2018, but the unprecedented events of 2020 in the wake of the COVID-19 pandemic significantly boosted this growth to a massive 77%. In all, since 2017 thematic portfolios represent almost 40% of all equity fund net sales.

Asset managers have always tried to identify trends. But thematic investing – building a portfolio around companies benefitting from long-term economic, political, or societal structural shifts, rather than a sector or geographical region, is rapidly rising.

As the global economy evolves, it has become increasingly important to understand not only the challenges that the world is facing but how the way we live and work is changing. These megatrends – digitalisation, changing demographics, the rise of ESG and more – have increasingly influenced the way that we view the world and where we see potential opportunities to invest.

Investors are increasingly trying to understand how thematic funds fit into broader investment portfolios, and how introducing these strategies will influence portfolio construction. For these reasons, we have commissioned this research to explore the evolution of thematic investing, and the compelling case around these strategies being a mainstream investment approach.

AXA IM has a long history of thematic investing, in the conviction that such strategies can provide investors with access to superior

growth potential. What's more, we believe it has become evident that many companies can no longer be classified fully according to traditional sector or industry classifications, as many of today's market leaders operate across multiple business lines – creating new investment opportunities.

We also believe that such thematic strategies can help investors future-proof their portfolios, by identifying the companies which are best positioned for long-term changes. A thematic approach enables investors to have potentially better visibility on the future trajectories of companies, rather than focusing on the shorter-term macro noise or investment flows which can be unpredictable over the long run.

Many of the ways in which the world has changed because of the pandemic are here to stay - and the evolution of the global economy was already gathering pace before 2020. We believe that these fundamental shifts have changed the face of investing in a new and exciting way which can offer investors the potential for superior long-term investment returns.



Mark Hargraves, Global Head of Framlington Equities,
AXA Investment Managers

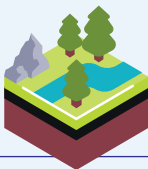
Summary

1 Fund selectors often think thematically



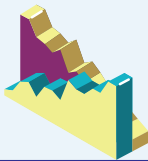
When fund selectors are invited to describe the future, they often articulate their predictions in a thematic manner. Across the world, they say that new ways of thinking are necessary. The world has changed and old approaches, such as looking at opportunities by sector, are now becoming less useful. Fund selectors want to explore investment opportunities in ways that suit the methods they use to think about both the commercial and wider world. Thematic funds are an appropriate response to this demand.

2 A diverse but coherent landscape



The thematic investment landscape is diverse and complex, but we believe that it can be organised into segments that are intuitive and useful. We identify five macro groups of thematic strategies: sustainability, emerging technology, changing consumption, healthy living, and multi-theme.

3 The rise of thematic investing



The thematic funds that we track globally contained assets of €572bn at the end of 2020. The largest region is Europe followed by Asia Pacific. The largest theme is emerging tech followed by sustainability.

Thematic fund assets have grown at an annual rate of 37% since 2018. In 2020 they grew by 77%.

There has been significant demand for 'multi-sustainable' funds in Europe. In North America and Asia Pacific emerging technologies such as disruptive tech, AI & robotics, and a range of others such as security/cybersecurity, fintech, semiconductor, connectivity and digitalisation opportunities have dominated.

What we think we are seeing is a deep-rooted evolution in demand for thematic investments based on fundamental and considered changes which will remain with us for some time.

4 COVID-19 - a powerful tailwind



The global pandemic has had the effect of significantly accelerating many of the trends within the thematic universe, according to fund selectors. More than that it has prompted new ones. Thematic funds have proven their resilience during COVID-19 – unlike many other types of funds, they are capable of raising assets in a market downturn.

5 A considered place in the portfolio



Fund selectors use thematic investment approaches in varied, well-informed and thoughtful ways. Thematic funds are seldom employed as a core element within portfolios. Selectors tend to see thematics as a global, strategic approach. They favour active management for well-articulated reasons. Thematics funds often replace traditional geographically or sector-based approaches. The presence of institutional investors in this market offers additional evidence that the trend towards a thematic approach is part of a fundamental and carefully thought-through change being made by all types of investor.

6 A rigorous due diligence approach



Fund selectors apply added controls within their selection processes when assessing thematics, further evidence of their considered approach. They have a clear idea of the qualities they value and the potential pitfalls.

7 Thematics has the potential to transform asset management



What is the potential for thematic investing to influence the future development of the asset management industry? Well, it has already had a dramatic impact – since 2017, this corner of the industry has represented 39% of all equity fund net sales. It is not unreasonable to think it will continue to play an important role.

1. Fund selectors often think thematically

When fund selectors are invited to describe the future, they often articulate their predictions in a thematic manner.

Fund selectors describe the future using a wide range of perspectives. They talk about economics, politics and geopolitics, and they sometimes use regional, asset class and industrial sector viewpoints in their predictions. They also describe their thinking using themes.

Thinking thematically is now widespread among fund selectors.

When we invited 90 fund selectors to talk about the future, three in four of them used themes to some extent in their descriptions.

We are not saying survey respondents employed thematic thinking exclusively – they very often use it alongside other considerations and approaches.

Examples of thematic thinking

‘I am optimistic about big data, artificial intelligence, packaging equipment, new materials, new energy, traditional Chinese medicine and other favourable areas of national policy’.
China, retail bank

‘Some of the megatrends which will be with us long term include healthcare, health tech, fintech, electric vehicles. Other major themes are data exploitation by big corporates and climate change of course’.
Germany, fund of funds management

‘I think we’re in a position where the planet is in danger, which means we are all in danger. Governments, people, and fund selectors are more aware of this. And this will drive demand for clean energy over the next ten years’.

UK, financial adviser

‘One big megatrend that we see is a continuing shift towards technology, automation, more distributed work versus centralised work; transitions in transportation and more autonomous vehicles, more robotics, again, more technology at all levels throughout the economy’.

US, financial planner



Fund selectors say that new approaches are necessary. The world has changed and old approaches, such as looking at opportunities by sector are now becoming less useful.

In the past, the investment world and the opportunities that existed for investors could be described using a variety of perspectives such as geography, asset class and industrial sector. Increasingly, investors are finding that they need a new language, not necessarily to replace but to accompany these viewpoints.

This need for new perspectives is a reaction to the changes - many of them dramatic - which investors have seen and predict will continue to have an impact in the commercial world, and in society at large.

These include climate and demographic shifts, and changes in technology, in automation, healthcare and consumer needs, that we are all aware of.

In the research conducted to explore the attitudes of fund selectors, we hear them say that these changes mean the companies in which they invest are also evolving, they are defying traditional models.

As a result, many selectors argue that looking at investment opportunities purely geographically or by industrial sector does not help.

They want to think about the future more and be driven less by what has happened in the past. The turbulence caused by COVID-19 has further emphasised that old models are becoming less useful.

It's not just the investment professionals who are thinking in new ways. They are being prompted by clients who want to see their own views of the world reflected in their investment portfolios, for example in the area of 'responsible' investing.

Switch from old school approaches

'You have to switch from these old school approaches. Sometimes it's wrong to put BMW and Tesla in the same category. Times change and maybe we have to change our ideas'.
Germany, fund of funds management

'Softbank Group has many different businesses, and it is difficult to choose which sector it falls into. It's a very traditional company but since the business management is changing, its classification will be out-dated. We shouldn't be tied to sectors'.
Japan, wealth manager

Some find geography less interesting

'Fund selectors are gradually finding that the traditional approach, for example global equity funds or China funds, is too vague. This is not the way to target the right trends'.
Taiwan, retail bank

The old models are tough to follow

'Traditional investment approaches now seem like the ancient way. We saw that during a crisis like COVID-19, the traditional models can be tough to follow and tough to work on'.
France, fund of funds management

'Traditional thinking has a top-down approach, looking at what was running well in the last couple of months or years. What I want is to be looking forward'.
Germany, fund of funds management

Clients are also thinking in new ways

'For the millennial generation, sustainability aspects are becoming increasingly more important and the demand for corresponding investment opportunities is increasing'.
Switzerland, advisory portfolio management

Fund selectors want to explore investment opportunities in ways that suit the methods they use to think about both the commercial and wider world. Thematic funds are an appropriate response to this demand.

We have noted that three in four fund selectors use themes to some extent in their thinking. It is hardly surprising then to discover that a similar proportion (80%) of those we spoke to were also users of thematic funds. And of those that don't invest thematically, over half said they were considering doing so in future.

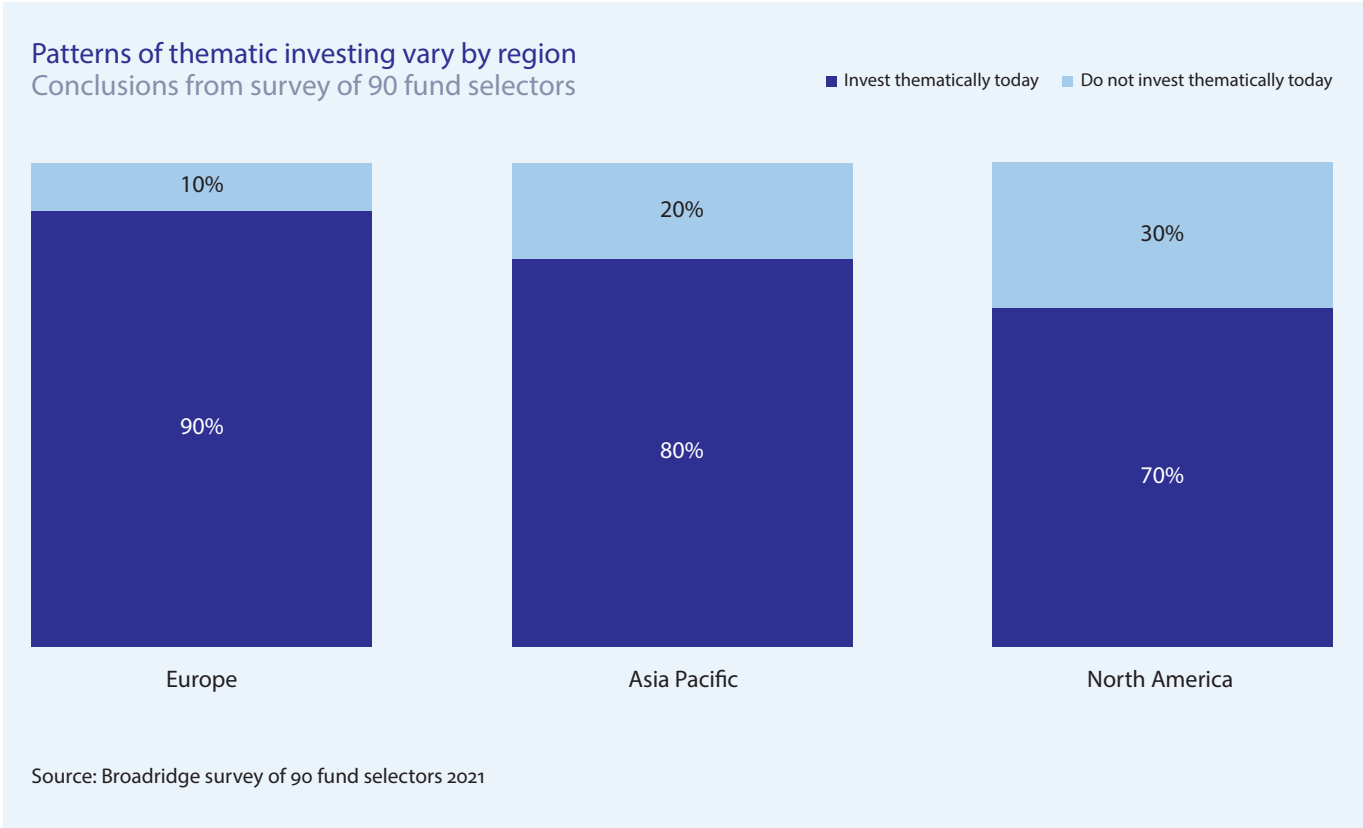
Globally, 62% of our respondents both thought and invested thematically. However, it is important to point out that just because selectors think thematically, does not mean they always invest this way – there is a significant minority who don't. And equally, non-thematic thinkers sometimes go on to be thematic fund selectors.

Our sample is small and was designed to give us an indication – not proof – of what is happening across the market. We

recognise that further and deeper research is required to form conclusive results. But we believe these responses strongly suggest that most fund selectors want to explore investment opportunities in ways that suit how they think about the business and wider world. Our conclusion is that thematic funds are an appropriate response to this need.

Patterns vary by region. While we encountered thematic thinking in 87% of the European fund selectors we spoke to, it was 80% in North America but only 63% in Asia Pacific.

And the incidence of thematic investing is also lower outside Europe. While 90% of Europeans that we spoke to invest thematically, it was 70% in North America, and 80% in Asia Pacific.



2. A diverse but coherent landscape

The thematic investment landscape is diverse and complex, but we believe that it can be organised into segments that are intuitive and useful.

Thematic equity investing is an approach which aims to gain exposure to companies which will benefit from defined long-term structural changes resulting from political, economic, and social forces. It contrasts with other approaches which seek to gain exposure, for example, by sector.

With trends as diverse as millennials, robotics, clean energy and the circular economy, it is tempting to conclude that the thematic landscape is too diverse and complex to segment in a coherent way.

What makes matters worse is that there is no universally accepted categorisation. When you scan the product literature and the capabilities of asset managers operating within the thematic space as we have done, it is clear several different approaches have been devised. The result is sometimes confusing for investors, we were told.

Using a set of criteria – opposite – that each fund had to meet to qualify under our definition of thematic, we have identified 1,471 thematic funds in our global dataset with total assets under management at end 2020 of €572bn.

The sheer number and variety of funds can appear daunting, but they can be organised in a way that minimises confusion. Broadridge has devised a framework that it believes makes intuitive sense and allows for a greater understanding of the macro and micro groups that underpin it. Broadridge's thematic segmentation map offers two other features: it synchronises with many of the existing approaches being used and resonates with our survey respondents, who described their thematic approaches to us in language which usually mapped easily into the Broadridge thematic framework.

Some remain confused

'I am a bit confused. If you look into the holdings contained in thematic funds, they can be very similar to other equity products. So, Tesla can be included in an Electric Vehicles thematic fund and can also be included in other types of high technology sector funds. So how exactly do you define thematic?'
Taiwan, retail bank

'Certain themes are not so clear cut. For example, ESG. Is this a sector, or is it a theme? I don't really get the difference.'
Singapore, retail bank

Criteria that must be met for a fund to qualify as thematic in our universe

Is the strategy designed to gain exposure to a defined theme or group of themes that fall within Broadridge's thematic framework? There is an important difference between a fund that identifies opportunity by sector (Technology Fund) and those that identify by theme such as developments in robotics and artificial intelligence (Thematic Fund).

Is a thematic approach present but not dominant in the fund? In our multi-themed classification, we exclude global equities strategies which mention a thematic approach as part of a variety of traditional active approaches. But we do include global equities strategies which place a strong emphasis on a thematic approach.

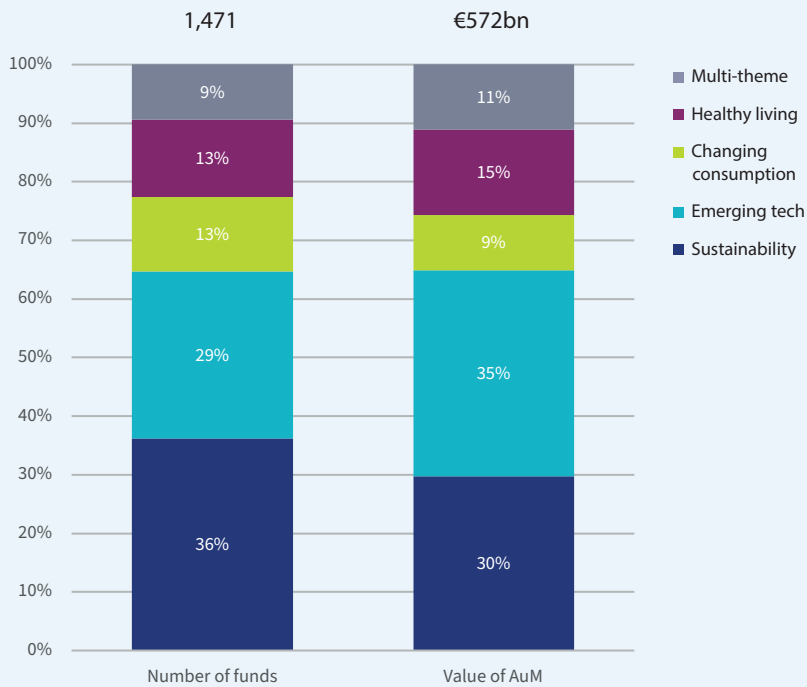
Is there a specific impact objective? Note, not an impact report, but a specific impact objective for the strategy. If there is, then we exclude that strategy from our thematic universe as we believe that the impact objective takes precedence and changes a thematic strategy to an impact strategy.

Broadridge's framework is built around five macro groups of thematic strategies: sustainability, emerging technology, changing consumption, healthy living, and multi-theme. These thematic groups are in turn underpinned by 13 micro groups such as emerging wealth, biotechnology, ageing demographics, and clean living.

The map opposite is set against the wider landscape of investment and shows how we separate thematic from other investment approaches. Thematic investing is a subset of four larger investment categories that we call technology, responsible, consumer and health investing. But thematic is distinct in each case.

For example, we explain why we think technology funds are not thematic and are part of the large sector funds universe. We also distinguish ESG and Impact funds from thematic products.

The thematic fund universe Global thematic funds by macro theme 2020



Source: Broadridge Thematics Analysis 2021



The thematic landscape



Source: Broadridge Thematics Analysis 2021

*See Appendix 1 for more detailed definitions of Macro and Micro themes

Thematic spotlight



1. Sustainability

This group includes equity strategies focused on themes like resource scarcity (e.g. water), clean energy (e.g. solar energy) and clean living (e.g. the circular economy).

It is important to note that this group of strategies is only one corner of a much bigger and more diverse 'Responsible Investing' megatrend. That broader trend is influencing the asset management industry in many ways including product design (e.g. how do you integrate ESG into fundamental valuation processes? How do you vote? How do you screen? What is the impact of your portfolio on the wider society?). The answers to these questions are crucial to institutions and selectors, and are being reflected in emerging groups of products (e.g. ESG focused strategies, Impact strategies) but these are not part of our thematic universe.

Our 'Other' sustainable category is a micro theme that is mainly made up of the opportunity arising from what we could call 'multi-sustainable' themes, an investment proposition that spans many sustainable micro-themes, for example scarce resources, clean energy and clean living.



2. Emerging Technology

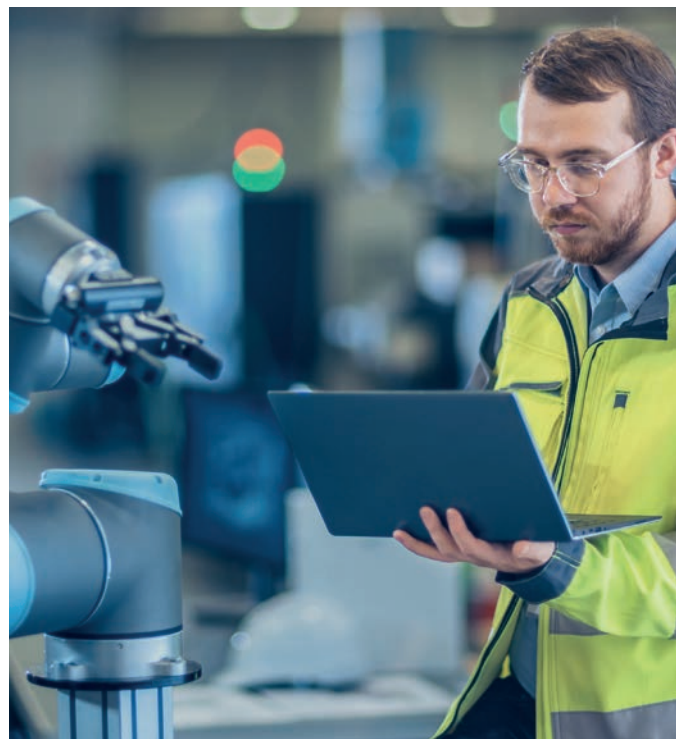
An important element of this is robotics & artificial intelligence (AI). We include in this category only those funds which have an explicit focus on robotics & AI within their fund name.

Disruptive technology captures the opportunity arising from technological advancements that have the potential to displace older technologies, create new markets, and permanently alter the way the world operates.

'Other' technology is a micro theme we use to capture the opportunity arising from a range of other emerging technology focused themes, which are predominately clustered among security/cybersecurity, fintech, semiconductor, connectivity, and digitalisation opportunities.



More detailed definitions of Macro and Micro themes are in the Appendix





3. Healthy Living

This category contains biotech and medical innovation which captures the opportunity arising from the rapid advancements occurring within the biotechnology/genetic therapy industries and innovation within the medical space.

It also covers ageing demographics which captures the opportunity arising from the growing recognition of the need to address the challenges of the world's ageing population, a result of both increasing life expectancy combined with a decreasing fertility rate.

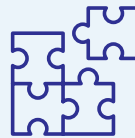
'Other' health is primarily focused on broader health and wellness issues, or on the digital health space.



4. Changing Consumption

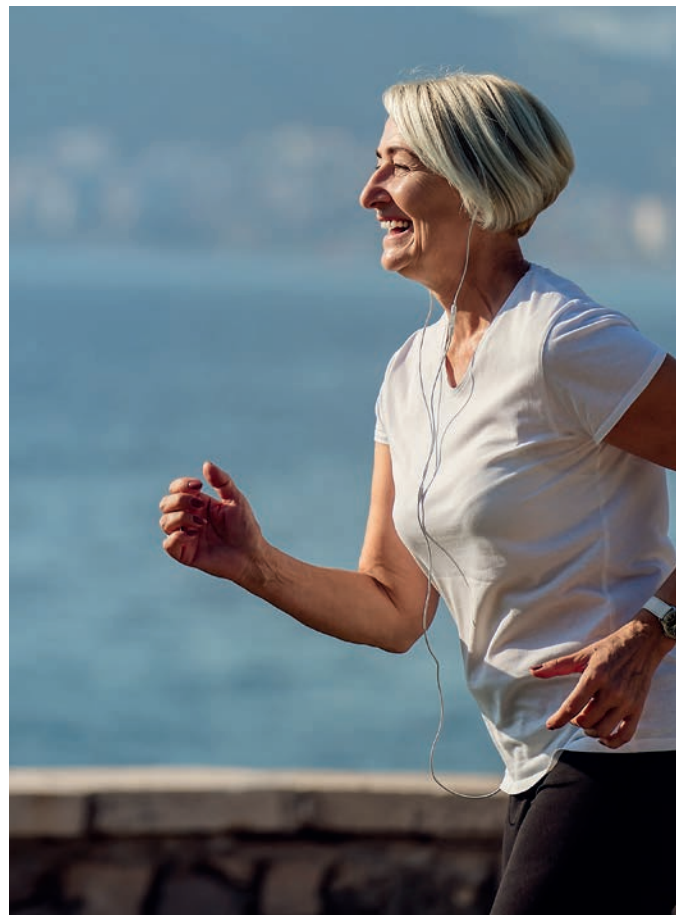
This segment contains emerging wealth which captures the opportunity arising from sources of emerging wealth, most notably contained within Chinese/Asian consumers, and within the 'millennial' generation across the world who are experiencing an acceleration in purchasing power, in part as a result of intergenerational transfers of wealth.

'Other' consumption captures the opportunity arising from broader consumer trends and innovations, such as within the growth of e-commerce, the development of electronic payment systems, and changing consumption patterns.



5. Multi-theme

This captures strategies which combine several themes within one strategy. At a minimum this will be two macro themes, however a fund that is categorised this way will often target opportunities that cut across the full suite of themes within the overall thematic landscape.



3. The rise of thematic investing

Thematic funds around the world contained assets of €572bn at the end of 2020. The largest region is Europe followed by Asia Pacific. The largest theme is emerging tech followed by sustainability. Thematic fund assets have grown at an annual rate of 37% since 2018, and in 2020 they grew by 77%.

Thematic funds around the world contained assets of €572bn at the end of 2020.

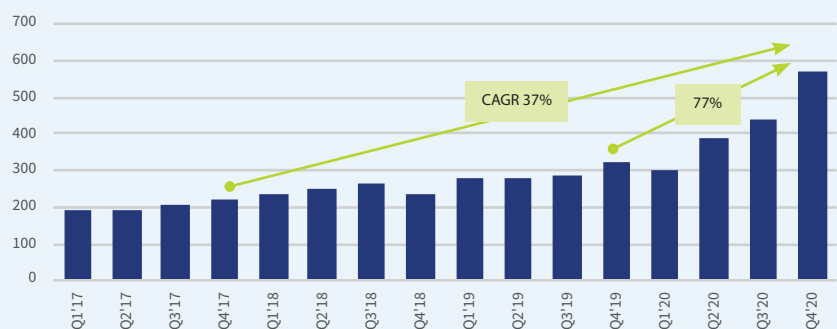
The largest region is Europe which now accounts for 43% of AuM in these assets, followed by Asia Pacific (32%). The largest theme is emerging tech which now accounts for 35% of AuM, followed by sustainability (30%). Between them, sustainability and emerging technology represent over 60% of AuM in all regions.

The assets in the 1,471 thematic funds that we track globally have in aggregate grown at an annual rate of 37% since 2018. The most recent year in our data, 2020, saw 77% growth in assets.

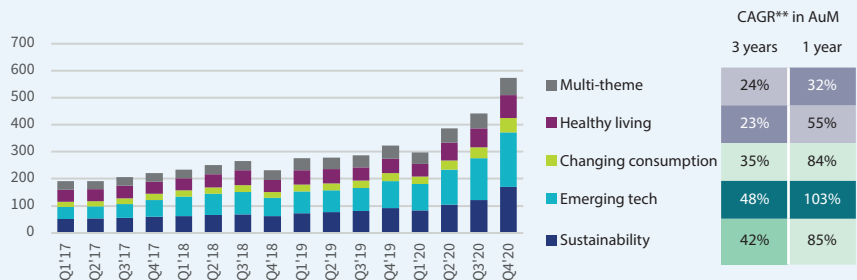
European investors have driven long-term growth in AuM, however in 2020 North America domiciled funds showed the highest growth (93%).

The fastest growing theme in the past three years has been emerging technology, and this has also seen the highest growth in 2020.

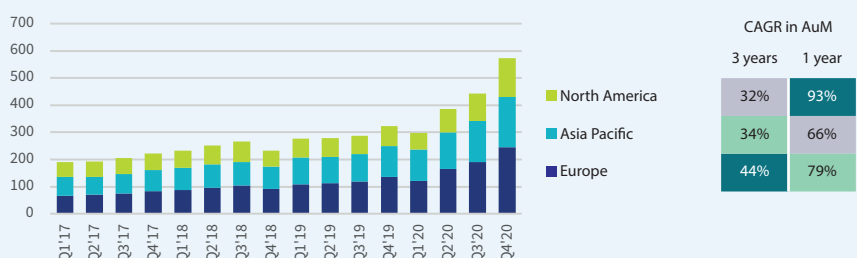
Thematic fund growth
Global AuM in thematic funds 2017–2020 (€bn)



Thematic fund growth by theme and region
AuM in thematic funds 2017–2020 by macro-theme (€bn)



AuM in thematic funds 2017–2020 by region (€bn)*



Source: Broadridge Thematics Analysis 2021

*See Appendix 1 for regional definitions

** Compound annual growth rate

There has been significant demand for ‘multi-sustainable’ funds in Europe. In North America and Asia Pacific emerging technologies such as disruptive tech, AI & robotics, and a range of others such as security/cybersecurity, fintech, semiconductor, connectivity and digitalisation opportunities have dominated.

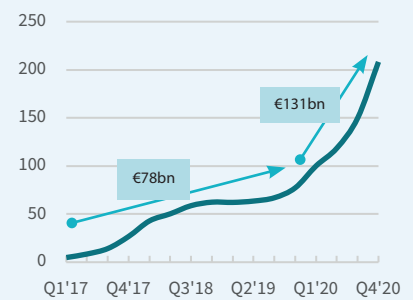
A full €208bn has flowed into thematic funds since Q1 2017. Over half of this cumulative inflow was recorded in 2020 alone: €131bn was invested in thematic funds globally in that year, which compares to €78bn in the previous three years combined. Below we show the proportion of thematic fund flows since Q1 2017 that has been allocated to each of our 13 micro themes.

The largest micro themes are those that we have labelled as ‘Other’ within each

segment which reflects the proliferation of themes, but we describe the contents of each again here.

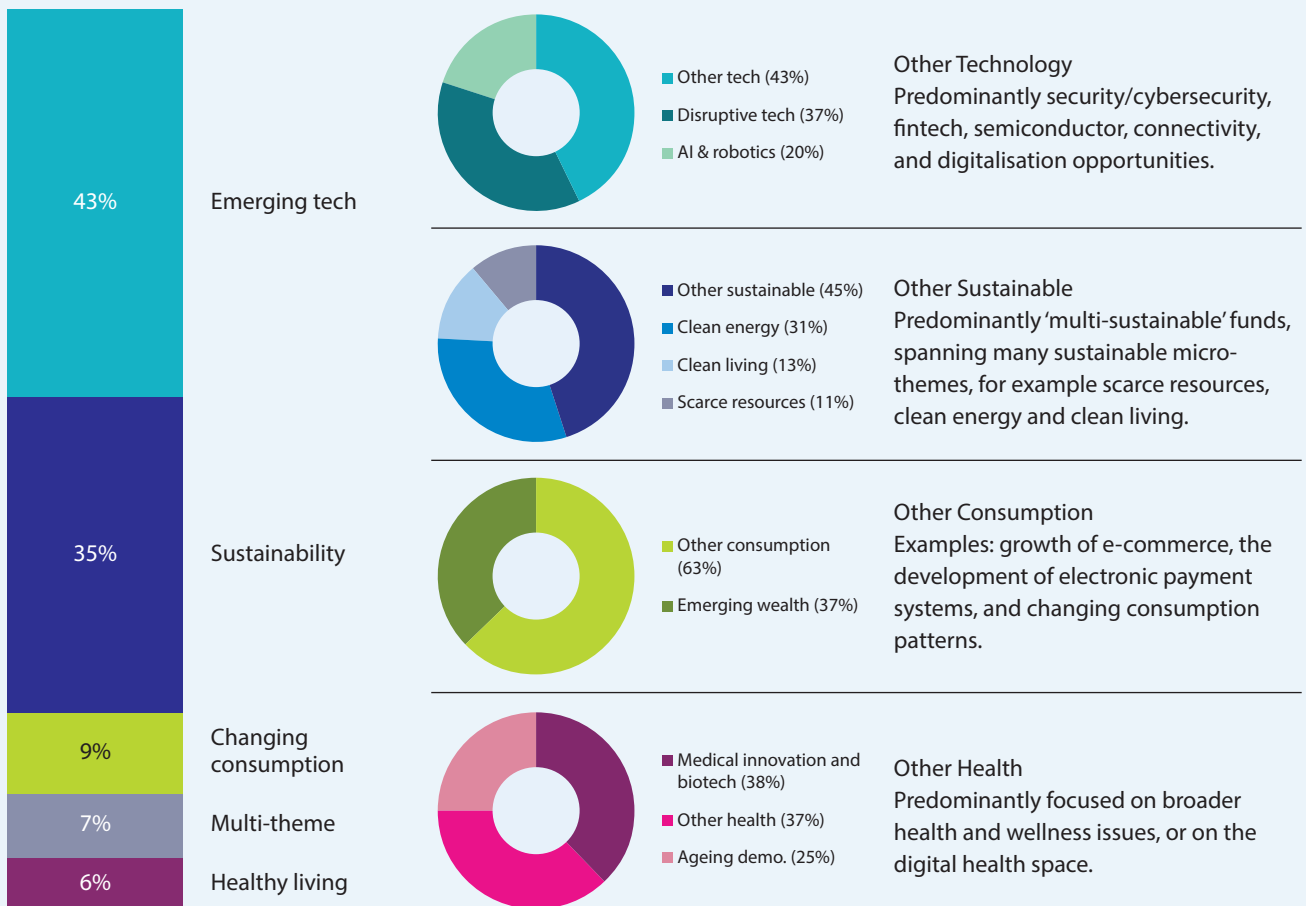
The micro themes vary in popularity by region. In Europe there has been significant demand for ‘multi-sustainable’ funds (within sustainable ‘Other’). In contrast, in Asia Pacific and North America demand is focused mostly on ‘Other’ emerging technologies (security/cybersecurity, fintech, semiconductor, connectivity, digitalisation, and disruptive technologies).

Thematic fund flows
Global cumulative net flows in thematic funds 2017–2020 (€bn)



Thematic micro themes

Share of cumulative global net flows of thematic funds 2017–2020

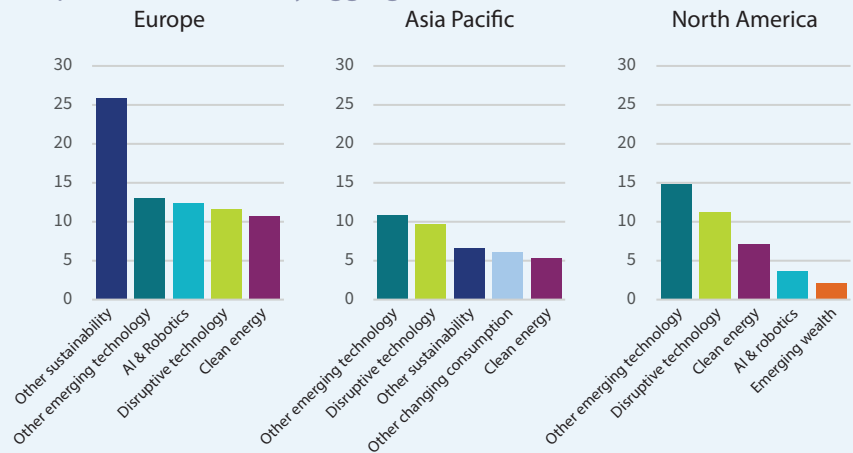


When we asked our 90 fund selectors to tell us on an unprompted basis what the most significant trends over the next 10 years would be, and the extent to which they described these trends in a thematic manner, the most frequently mentioned category was technology, as we evidence in the chart below. The popularity of tech globally is reflected in the proportion of fund flows directed to this theme in recent years. Sustainability was the next most mentioned theme, but this was predominantly in Europe. This regional focus on sustainability in the survey is also reflected in the buying patterns that we described earlier.

Why are European investors inclined to think and invest in sustainability funds proportionately more than their Asia Pacific and North American counterparts? One answer could be that European awareness of this topic is more entrenched due to regulatory initiatives set out by the European Union. Since the 2015 Paris Climate Accord, global warming has become an increasing focus of investors. New regulatory measures such as the EU Taxonomy and Disclosures regulations will serve to shine the spotlight further on sustainability issues in this region.

Top thematic micro themes

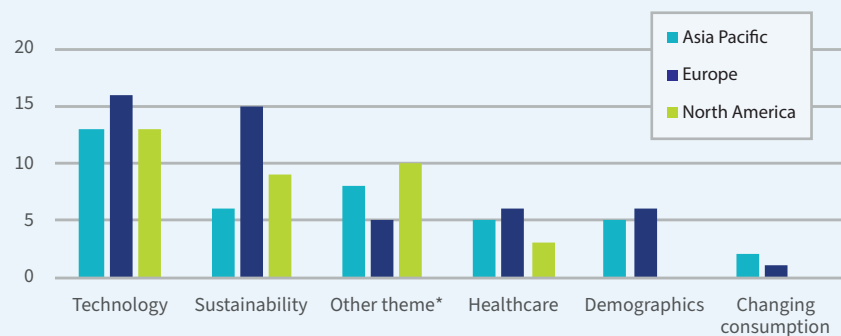
Top 5 micro-themes by aggregate flow 2017–2020 (€bn)



Source: Broadridge Thematics Analysis 2021

Thematic preferences

Structural megatrends that will define the economy and society over the next 10 years



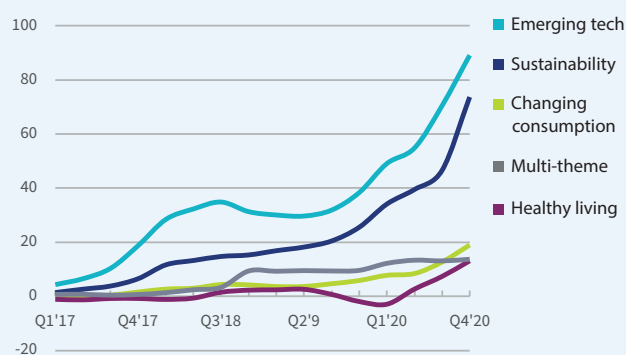
Source: Broadridge survey of 90 fund selectors 2021.

* A more detailed description of 'Other' theme can be found in Appendix 1.

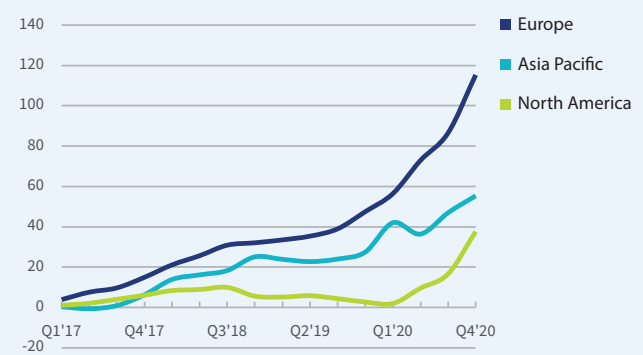
Thematic flows by theme and region

Cumulative net flows in thematic funds 2017–2020 (€bn)

By macro theme



By region



Source: Broadridge Thematics Analysis 2021

'Today, investors are not only seeking for positive financial returns, but they are also looking to generate positive impact on the society and the environment as they recognise that these companies will benefit from strong and resilient demand created by the shift.'

Framlington Equities has always fundamentally believed that the best way to invest in the long term is to invest in growth companies exposed to secular trends that will grow faster than the broader market and that have developed best sustainability practices.'



Amanda O'Toole, Clean Economy Portfolio Manager, AXA IM



What we think we are seeing is a deep-rooted evolution in demand for thematics based on fundamental and considered changes which will remain with us for some time.

When anything grows fast in the investment world, it is reasonable to ask whether this growth is sustainable. Is this a bubble? The recent growth of thematics has certainly prompted some commentators to express alarm. Fund selectors are asking themselves this question too.

We have been closely monitoring the growth in demand for thematic products since we started tracing its origins in 2015. Each year in Europe we interview 1,000 fund selectors and they tell us, among other things, in which areas of the funds landscape they expect their future needs will be greatest. The demand for thematics has been clear across this period, and since 2017 it has consistently been ranked in the top four, shown below. During 2020 it was behind only ESG in the leaderboard.

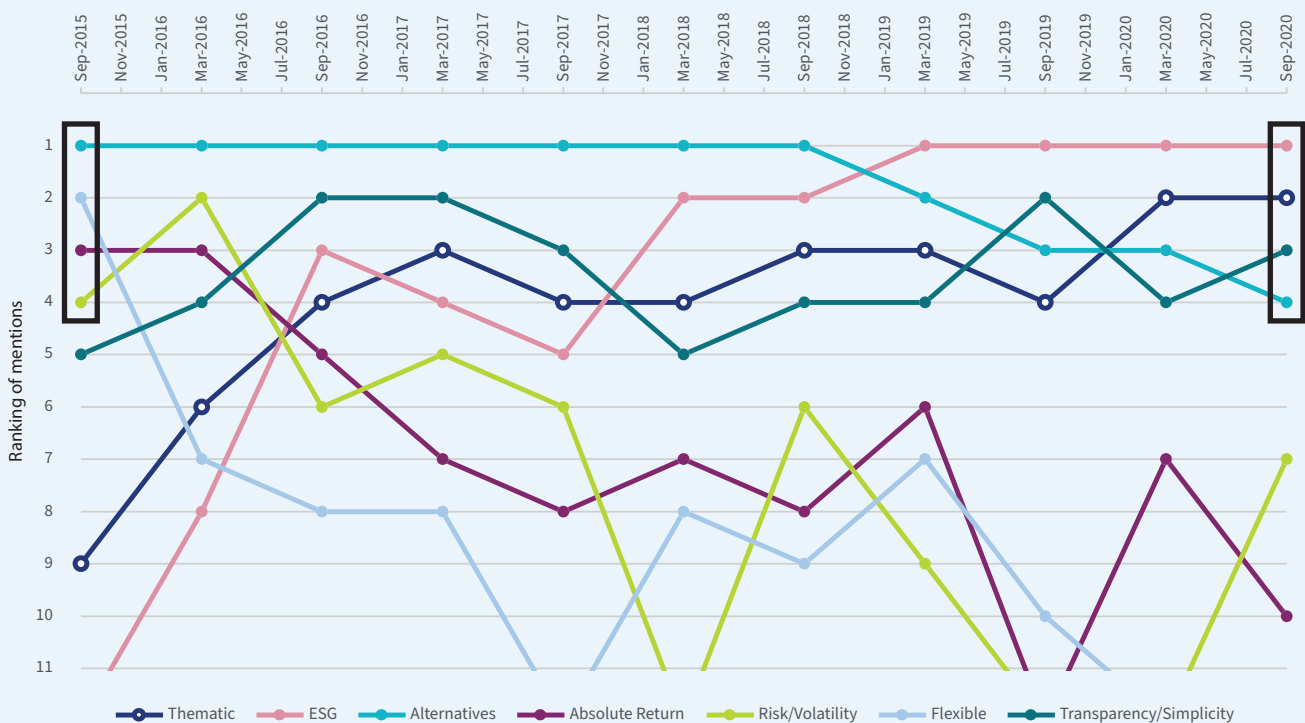
Thematic investing may look like a fad if you make the mistake of relying solely on headline numbers. However, when you also carry out a wider investigation of what drives investment behaviour, as we have attempted here and elsewhere in this report, it suggests something else.

Are we seeing a bubble?

'I hope that valuations are not going to reach absurd levels, which might make this area become a bubble. But we all remember 20 years ago – technology was a bubble then, and now those same technologies are the day-to-day reality'.
Spain, fund of funds management

Fund-related future needs

A selection of top fund-related future needs expressed by European fund selectors 2015-2020
Selection: the top 4 in 2015 and the top 4 in 2020



Source: Broadridge Fund Buyer Focus, Product Innovation Perspectives

4. COVID-19 – a powerful tailwind

The global pandemic has had the effect of significantly accelerating many of the trends within the thematic universe, according to fund selectors. More than that – it has prompted new ones.

Mercer has called the period from the middle of the 20th Century to today the ‘great acceleration’. They say that what we are now seeing during COVID-19 is an ‘acceleration within that acceleration’. Fund selectors that we spoke to for this project agree with this. Nine in ten said that COVID-19 had accelerated existing trends.

Climate change is an increasingly important issue for many of the fund selectors we spoke to, particularly in Europe.

Respondents suggested the stakes were magnified and the urgency to address shortcomings was amplified due to the pandemic, as investors and asset managers explored a broader range of climate-related priorities including ‘Net Zero’ commitments, climate benchmarks and Paris Agreement-aligned investment opportunities.

COVID-19 has also served to drive thematic investing momentum by prompting the emergence of new themes.

One respondent talked for example about the ‘dawn of a remote economy’. Many fund selectors mentioned this same thought. For others, digitalisation will be boosted by its leading role in countering the pandemic.

New regulations could further strengthen interest in climate-related themes and highlight truly dedicated thematic managers. For example, the EU’s Sustainable Finance Disclosure Regulation (SFDR) requires asset managers to identify and provide additional disclosure on products that have sustainable investment as their objective. Some less dedicated sustainable funds may choose to rebrand, while others will refine their scope and strengthen their propositions.

‘While many aspects of the digital economy delivered expansion during the COVID-19 pandemic, we are cognisant that there will be questions about the future likelihood of growth as the world returns to some level of normality. Nevertheless, we firmly believe that the long-term secular trends within the evolving economy remain intact, and there are clear signs that it is playing out even stronger as the turmoil subsides. It is our view that any long-term investor should resist panicking and, instead, recognise the opportunities on offer.’



Jeremy Gleeson, Digital Economy Portfolio Manager, AXA IM

Acceleration of existing themes

‘It has been a five-year jump in an 11-month timeframe, or more a 10-year jump. Yes, significant acceleration. My life has changed dramatically. My clients’ lives have changed dramatically.’
US, financial adviser

‘I think COVID-19 accelerated the transition to more ESG, clean energy, and green investment.’
UK, fund selector

Emergence of new themes

‘I think last year was probably the dawn of this remote economy where you are going to see a lot more of a tech-based, service-based economy. And the elimination of the big box store and the traditional retail environment, as well as a transition into a more web-based economy and environment.’
US, wealth adviser

‘Coronavirus, sustainability and digitalisation will be the key themes and drivers of change. Digitalisation will become an important theme for countering pandemics like the coronavirus.’
Switzerland, discretionary portfolio manager

Thematic funds have proven their resilience during COVID-19 – unlike many other types of funds, they are capable of raising assets in a market downturn.

As well as changing investment patterns of behaviour, COVID-19 has changed our way of living, and investors frequently reference this.

Fund selectors point out that COVID-19 has driven changes in the way that their clients want to approach their investments.

COVID-19 has also helped to prove the resilience of thematic as a product. Where other non-thematic fund products have seen huge outflows since the outbreak of COVID-19 and the corresponding falls in stock markets (and indeed since the downturn in 2018 as well), thematic funds have continued to attract new investors. A criticism sometimes levelled against thematic funds is that they are only ever capable of raising assets in a bull market.

As the chart below illustrates, thematic funds appear to be quite capable of presenting a strong case to investors in even the most distressed of market conditions.

Societal change in general

'People are sitting back and reflecting more, wanting to spend time appreciating nature and each other. We are thinking about the ageing population, mortality and caring for our older people.'

UK, investment manager

'I think COVID-19 boosts human being's fears and hopes for the future. People are forced to re-think their lifestyle and consumption behaviours. So, things will change.'

Taiwan, financial adviser/ domestic bank

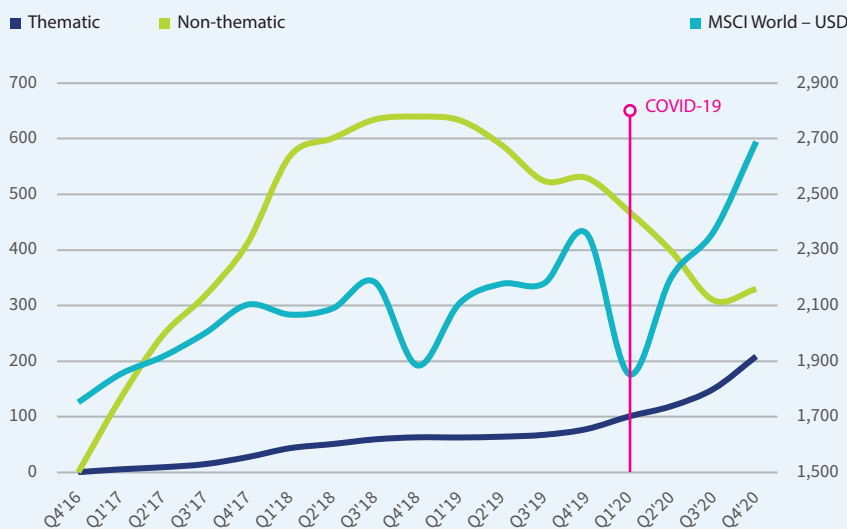
Change in client investment approach

'More people are paying attention to exactly what they're invested in and watching the transactional aspect of each account. I've noticed that pickup quite significantly here this year.'

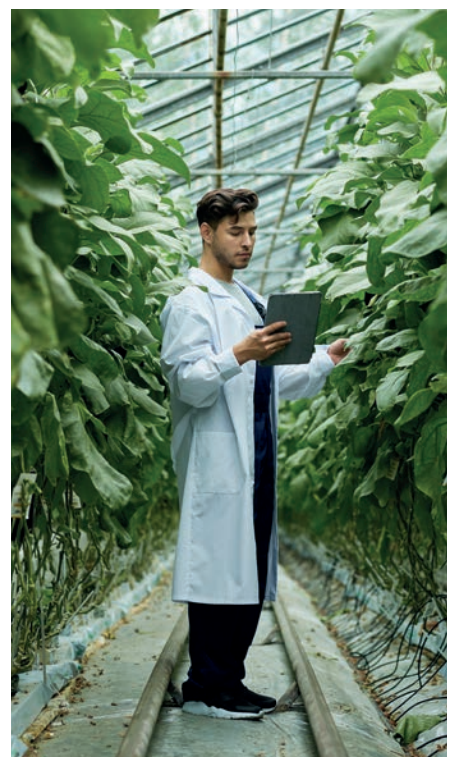
US, financial adviser

Proving the resilience of thematic investing

LHS - Thematic and non-thematic cumulative equity net flows (€bn)
RHS - MSCI World Index (USD)



Source: Broadridge GMI Funds, Broadridge Thematics Analysis 2021, MSCI



5. A considered place in the portfolio

Fund selectors use thematic products in varied, thoughtful ways. Thematics are seldom employed as a core element within portfolios. Selectors tend to see thematics as part of a global, strategic approach. They favour active management for well-articulated reasons.

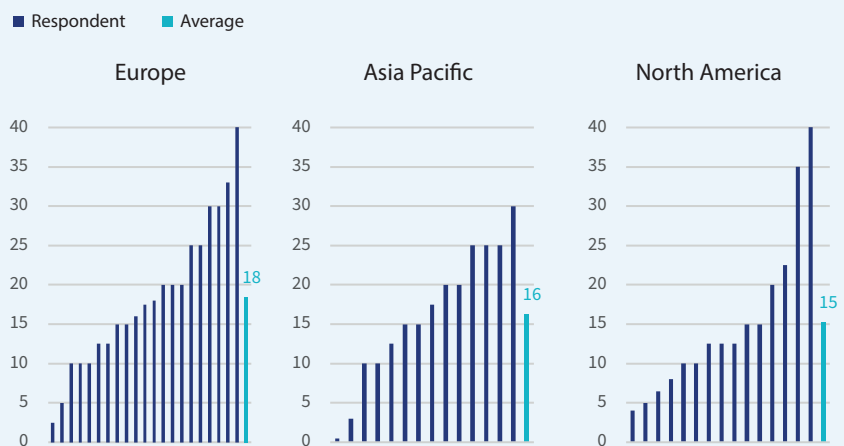
Thematic funds are seldom used as a core element within portfolios, according to the fund selectors we spoke to. Thematics tend to occupy a smaller or, as it is sometimes called, a satellite part of the portfolio. Thematic funds often play a role as a diversifier, to balance traditional approaches.

Our sample of respondents is too small to offer us conclusive proof, but our estimate is that thematic funds may make up 10% of a typical fund selector's portfolio today. Among the enthusiasts for thematic approaches, the proportion can be much higher: 15–18% of total portfolios* among those that used these investments and who were willing to share this data. It is interesting to see how these enthusiasts' behaviour varies by region.

In the past, thematic funds were often seen as specialist or separate holdings, however increasingly, especially in Europe, they are used as an element within global equity portfolios.

Most investors see thematics as a long-term or strategic investment. Many take a long-term view but are also watchful in the short term. However, one in four say they use thematics in a tactical way.

Role of thematics in fund selector portfolios
% of total portfolio held in thematic funds by respondent



Source: Broadridge survey of 90 fund selectors 2021*

Core or satellite

'Traditional equity from my perspective is still the normal way to invest for now and the thematic is a satellite.'

Germany, Insurance company

'We mainly allocate based on capitalisation and style. But within the value and growth portfolios, we have satellites that are subsections, and this is where thematics belong. It's a total in thematic around 15% of the portfolio.'

US, securities company

Global or specialised

'Well, perhaps two or three years ago thematic was more specialist or more specific. But nowadays it's part of our global portfolios.'

Spain, investment committee member

*These numbers deserve additional comment since they may appear high.

- The equivalent weighted average of the sample when we include those that don't use thematic funds is lower than the average we show here.
- Several respondents, for example those managing funds of funds, are only invested in equity, so this will tend to increase the proportion.

- While we did our best to ensure a common definition of thematic investment in our interviews, we cannot guarantee that some respondents did not use a wider definition, which would have had the effect of increasing the proportion held in this type of investment.
- Our small interview sample may not be representative of the wider market, so it is possible that the fund selectors we spoke to do not behave in ways that would be replicated in a wider sample.

Strategic or tactical

‘Those markets require time to grow, at least 3–5 years. And they fluctuate, so if we try to be tactical, we are likely to enter/exit the market at the wrong time.’

Hong Kong, retail banking

‘For the moment, we are strategic because I don’t think cloud computing and robotics is going anywhere for the next five years. But we do keep an eye on valuations.’
UK, wealth manager

Fund selectors frequently see the value of thematic investing coming from its focused, specialised, flexible and high conviction style. They believe that as many themes are evolving, managers need to be nimble enough to capture inflection points and shifting patterns of growth. They indicated that specialists are required to ensure the company is properly aligned to a specific theme at different points in the cycle. A full 80% of them told us that they preferred to see active management for these reasons.

While passive managers have attempted to capitalise on soaring retail interest in thematic investing this remains the domain of active managers.

Some 73% of thematic assets that we track are held in active as opposed to passive funds. This proportion is gradually falling mainly because US investors, who are driving recent growth, are more prone to use passive thematic approaches.

A clear preference for active

‘Thematic funds need to focus on more specific and limited amounts of stocks – normally around 30-40 max. This is why we believe in active management in this area.’

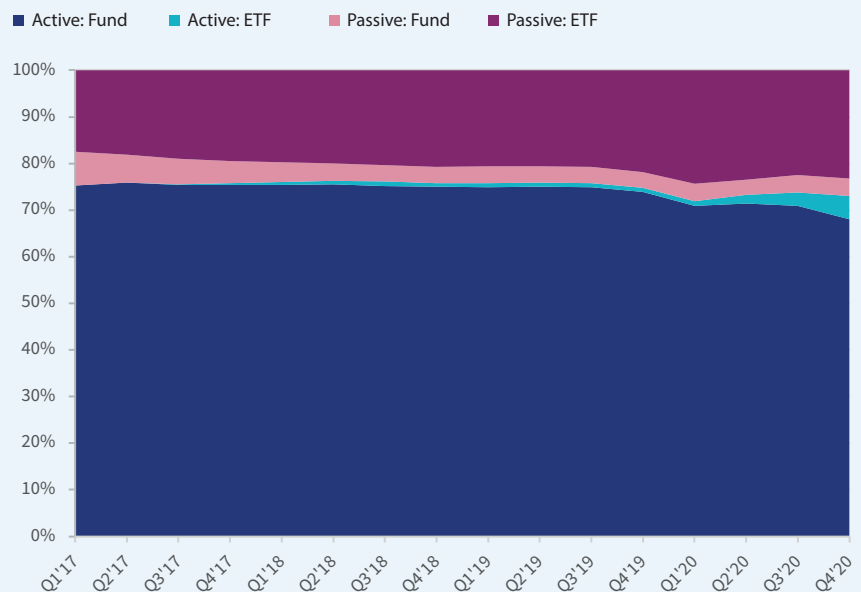
France, fund selector

‘Topics such as cyber security, cloud computing and blockchain combined with an active fund management are specialist themes, where we would rather work with an active management.’

Germany, discretionary portfolio manager

Active vs passive thematic funds

AuM in thematic funds 2017–2020 by active/passive*



Source: Broadridge Thematics Analysis 2021

Benefits are perceived for passive

‘We’ve noticed no correlation between active or passive management and the success or failure of a fund. Because of the investment philosophy of my firm, a passive investment philosophy, we gravitate primarily towards thematic index funds that are managed with a passive management approach.’
US, Investment committee member

While we – and the fund selectors we spoke to – are aware that active thematic funds carry a cost premium over passive equivalents, we can find no market-wide data to rely on to show the extent of this difference in price. Survey respondents have strongly articulated the case for active management despite this price differential,

but passives will continue to find success in some quarters. For example, one very large disruptive tech fund has proved hugely popular in the US with its active ETFs which pick stocks and make frequent trades to generate returns. Active ETFs are still nascent in Europe, but they may yet gain traction if they can prove their worth.

*Definitions of active/passive are as follows:

- Passive Fund: A fund that aims to replicate the movements of an index of a specific financial market.
- Passive ETF: An exchange traded fund, or ETF, is a basket of different securities that are pooled together into one fund which is traded on the stock exchange.
- Active Fund: An actively managed investment fund is a fund in which a manager or management team makes decisions about how to invest the fund’s money.
- Active ETF: Exchange traded fund that has a manager or team making decisions on the underlying portfolio allocation or otherwise not following a passive investment strategy.

Asset managers are using a variety of benchmarks. For example, a selection of six robotics and AI strategies* use three benchmarks between them. Fund selectors also use a variety of benchmarks to assess the performance of their thematic funds, often adopting a combination approach. In some cases, they accept that no benchmarks are available, and this is sometimes seen as a weakness of thematic funds.

Thematic strategies are often positioned within portfolios as higher risk and higher reward opportunities. There is a clear awareness of the hazards here, arising for example from higher pricing in some potentially high growth sectors.

Retail/wholesale investment advisers also consider these factors in their approach to thematic fund selection. They often describe how clients with a strategic perspective and an ability to take a longer-term and higher risk approach were the most suitable candidates for holding thematic investments within their portfolios. Often this means younger investors.

Some commentators have mentioned that stocks in thematic funds may be over-priced. Clearly, there are areas of the technology market which appear inflated following a strong run for tech stocks last year, however respondents were aware of this risk. Some told us they were familiar

with the same argument being applied to valuations of growth fund stocks or certain sector stocks. Intuitive themes such as digitalisation and emerging tech are long-term investment trends, and many companies will be at the early stage of development where it is more likely to find mispriced opportunities. Fund selectors told us they relied on the benefits of active management to find a way through this challenge.

They continue seeing a role for active in this space in a way that many of them have ceased to see in other forms of investment.

Benchmarks

'There is no objective benchmark for thematic. Fund managers launch the product based on their judgement on future trends, so they have to take the responsibility to actively manage it'. Taiwan, wealth management consultant

'I think that at this early stage in the development of those two trends, there needs to be better transparency from providers, and more-comprehensible benchmarks'. Switzerland, discretionary portfolio manager

Risk profile

'Our thematic exposure is through small, mid-cap investments most of the time. So, given that it's actually quite risky, we don't want to have too much in a portfolio because of its volatility, and so I keep it to a set proportion of the portfolio size'. Singapore, private bank

Client needs

'A thematic strategy for me matches the profile of an investor that is more dynamic, wants to have the chance to have better profits, better yield. And they can also expect to lose it if the market conditions go down'. Spain, private bank

Concerns around high valuations

'You have to be a bit careful, but they are discounting growth for years and years. So, the valuation is much higher than a traditional, geographical equity fund'. Spain, fund selector

'It takes the discernment of a good management team to understand which companies are the better candidates to include in that fund, and which ones are the ones that should be excluded because they haven't reached an acceptable level of performance. We are huge advocates of active management'. US, Investment committee member

* Six selected Robotics strategies which between them in 2020 use three benchmarks: MSCI ACWI, iSTOXX® FactSet Automation & Robotics Index, and MSCI World ESG Leaders

1. PICTET Robotics strategy
2. BLACKROCK iShares Automation & Robotics strategy
3. CREDIT SUISSE Global Robotics Equity strategy
4. NATIXIS AI and Robotics strategy
5. POLAR CAPITAL Automation & Artificial Intelligence strategy
6. AXA WF Framlington Robotech strategy

Thematic funds often replace traditional geographically or sector-based approaches.

Although a small minority remain confused, most fund selectors have a very clear idea of the difference between traditional sector or geographically-focused approaches and thematic ones. We have summarised our impressions of how they articulate these differences in the table below. In each row, we describe how fund selectors tend to perceive the position of thematic and sector approaches within a range.

Sectors vs Themes

'Traditional sectors are losing their purpose. We do still have a sector approach for traditional equity. But more and more we're trying to push it out of the day to day. And we're looking at more thematical approach. We think it makes more sense'.
Spain, fund of funds management

'The fast-changing environment around the world has seen thematic strategies playing an increasingly important role in investors' portfolios. We believe these areas are likely to grow faster than the broader equity market, and thematic strategies generally have limited crossover to recognisable equity market indices. Thematic strategies could be used as a core equity allocation, or even to sit alongside active regional or sector-focused funds as an additional layer of diversification and growth'.



Tom Riley, Head of Global Thematic Strategies, AXA IM

Sector and thematic approaches compared

Differences between approaches as perceived by fund selectors

Fund Investment philosophy		← How do sector and thematic approaches differ? →				
Geographical approach	Limited by geography	Sector		Thematic		Global
Industry character	Mature	Sector			Thematic	New
Investment approach	Quantative	Sector		Thematic		Qualitative
Investment constraints	Rigid		Sector	Thematic		Agile
Investment selection scope	Technical		Sector	Thematic		General
Research focus	Traditional	Sector			Thematic	Future
Portfolio concentration	Wide	Sector		Thematic		Specific
Scope for selecting investments	Limited		Sector	Thematic		Broad
Fund manager skills						
Expertise required to select investments and manage a fund	General		Sector	Thematic		Specialised
Investor performance expectation and measurement						
Benchmark	Clear benchmark	Sector			Thematic	Unclear benchmark
Ease of predicting returns	More predictable		Sector	Thematic		Hard
Return character	Stable		Sector		Thematic	High-risk
Return focus	Shorter term		Sector		Thematic	Longer-term
Investor fund selection process						
Difficulty in assessing fund quality	Easy to judge	Sector		Thematic		Requires more expertise
Position of fund in portfolio	Core		Sector	Thematic		Element
End client engagement						
Appropriate investor characteristics	Traditional	Sector		Thematic		Dynamic
Ease of explaining to clients	Harder		Sector	Thematic		Easier

Source: Broadridge survey of 90 fund selectors 2021

The presence of institutional investors in this market offers additional evidence that the trend towards a thematic approach is part of a fundamental and carefully thought-through change being made by all types of investor.

We don't know the exact proportion of assets tracked that are held by institutional as opposed to retail/wholesale investors, but we can measure this split with precision in one important part of the funds landscape: cross-border or international. This makes up an important element of the European market (but only a small part of the market in Asia Pacific and North America). In Europe, Institutions account for 10% of the assets and these are more weighted towards sustainability funds, as the chart below illustrates. This has grown slightly since 2017 as we also show in the chart.

We do have data for other types of funds in Europe but for thematic products it is less reliable, so we must estimate. We

do however believe that the proportion held by institutions in cross-border funds is likely to be higher and not lower in the wider European universe. We are less sure of our ground in Asia Pacific and North America – in these regions we cannot currently offer estimates.

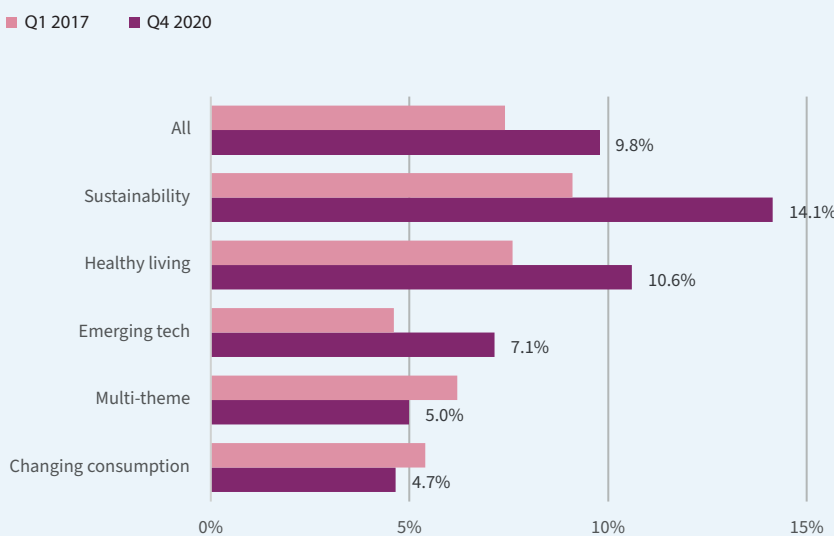
In addition to investments through fund vehicles, institutional investors already delegate large thematic mandates to asset managers. We are aware of several recent searches and €1bn plus thematic mandates awarded by European institutions, particularly Dutch defined benefit (DB) schemes. Most of these are focused on sustainability, and many are passive in approach. We have highlighted a selection of developments in the UK market below.

Thematic developments within the UK defined benefit Institutional market.

- A large local authority DB scheme is accessing specialist active sustainable thematic strategies. According to the CIO 'sustainability is an integral part of our investments'
- Another local authority DB scheme in 2020 awarded a £1.3bn multi-manager sustainable mandate which implies a thematic approach, stating that its aim is 'to identify companies and investment themes able to succeed long-term through contributing to society.
- A leading investment consultancy which influences thinking in the institutional markets, has designed its own multi-manager sustainable equity strategy for institutional investors, using a core + thematic satellite approach built around highly rated managers. A full 35% of the assets will be in sustainability thematic strategies.

Institutional investment in thematic

Proportion of thematic fund AuM held by institutional investors European cross-border funds Q1 2017 & Q4 2020



Source: Broadridge Thematics Analysis 2021

6. A rigorous due diligence approach

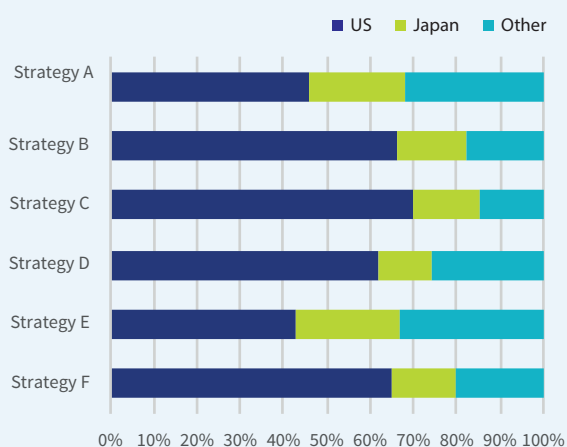
Fund selectors apply added controls within their selection processes when assessing thematics, further evidence of their considered approach. They have a clear idea of the qualities they value and the potential pitfalls.

Selectors clearly recognise that they face a governance cost when investing thematically, acknowledging opportunities in this area are more complex and time consuming to assess and judge.

Several fund selectors told us that their role is to select themes as well as funds. First, they identify themes that they believe in. This is a task that selectors do not underestimate and which they recognise requires considerable effort. Then they search for funds which will best enable them and their clients to profit from their chosen theme. It is quite possible that some fund selectors will start to think and even style themselves as ‘Theme Selectors’ as well as ‘Fund Selectors’ in future.

Fund selectors told us that they are careful to judge the detailed components of funds. They want reassurance that the fund properly reflects the thematic goal and achieves it with a concentrated and focused portfolio – they expect a thematic fund to contain fewer investments than a traditional equity fund. They fully anticipate that funds following apparently similar themes will be invested in different ways – for example, the chart below shows the different regional exposures of six anonymised robotic strategies. Moreover, they expect the fund to be adaptable and flexibly managed so that it reflects changes in the market. Selectors sometimes refer to this as purity and are critical of the many funds they see which do not meet this standard.

‘Portfolio variance among thematic strategies’
Selected robotics and AI strategies regional breakdown 2020



Source: Broadridge European Product Prism 2020. Strategies compared sit under what Broadridge consider the Robotics and AI theme under the Emerging Tech category of the Broadridge Thematic framework.

Client needs

‘It probably takes an extra level of looking, because for a US large cap fund, it doesn’t take much analysis to know what they’re talking about. But with a healthcare fund, there’s so many different types of healthcare that I would want to know a little bit more.’

US, investment committee member

‘I think when it comes to thematics, we probably hold them (the managers) up to a higher standard. The selection process for us going into a thematic fund is more intense than it would be for just a normal equity fund.’

UK, wealth management

Theme selectors

‘Our chief investment office articulates the major themes on a regular basis. From there, our fund selection team evaluate funds that focus on these themes on a quantitative and qualitative basis and will then select the fund for us to focus on.’

Singapore, retail bank

‘The first step is that at the investment committee we really understand the big themes going forward. And then the next step is to implement those themes by selecting funds.’

US, wealth management

Purity and concentration

'For thematic funds I want to see a tight focus on the chosen theme, and I expect a high level of conviction on the fund manager's part in the overall strategy.'

UK, discretionary portfolio manager

'A key role for us as bankers and advisors, is to carefully cherry pick the best thematic funds. It's our job to exclude the funds that are presenting a thematic strategy, but which are then not making the right investments to match the theme.'
Switzerland, private bank

Fund selectors place a high reliance on the expertise of the thematic fund managers, and the resources and specialist knowledge they have.

But it's not just the scale of the resources, they are looking for the smartness of the process, and the unique way that the managers access and research markets.

Investors show awareness that they need to be careful to avoid managers with inadequate experience and coverage. This is reflected in the degree of concentration of assets in a small number of well-established names.

'Focusing on sectors can just capture one opportunity, not all of them. A lot of the growth opportunities cross many sectors, plus are global in nature. When you have a systematic framework and a robust research process, thematic investing on a global basis gives you a powerful proposition. It is based on a clear long-term vision, and it's adapting to where the world is heading'



Mark Hargraves, Global Head of Framlington Equities, AXA IM

Expertise of manager

'The firm we have recently selected has a scientific committee that they've created with professionals and academics to define the investment universe of that particular strategy. And then the fund managers decide which fit the bill from a liquidity or strategic standpoint. So, it's much more of a scientific approach.'

Italy, financial adviser

'Another firm we use works very closely with entrepreneurs themselves. They will literally talk to Tesla and Alibaba, or whoever, so they have an excellent insight into how these companies think and where the next big thing is. I can't do that. I can't pick up a phone to a Tesla executive and say, "Hey, what's going on?" So, that's big.'

UK, wealth management

'There's plenty of one-man bands claiming that they've got the future of healthcare or whatever and we've been quite negative towards those.'
UK, Investment committee member

- We have identified 370 different managers offering funds in this space.

Large number, but not unusual.

- The top 5 manage 29% of the AuM and the top 20 manage 56%.

Significant concentration, but again that's not unusual.

- 139 managers (38% of the total number) each have assets of less than €100m in this space.

Worrying tail of managers that may not be viable.

An objection to thematic funds is that they underperform traditional equity products. Morningstar* has provided performance analysis that shows most themed funds fail to meet their benchmarks over a particular period. BlackRock** has countered this with analysis of two historical themes – smart phone technology and water. After back testing both themes the team concluded that thematic exposure offers the potential to outperform the broader market, 'but that risk and style characteristics evolve over time and need to be managed dynamically'.

Fund selectors recognise that performance is a key criterion and, as you would expect, they mention this a lot. They explain that performance measurement is difficult in what is a nascent market. As funds are often not long established and lack clear benchmarks, they must be judged in other ways.

Fund selectors tell us they tend to assess the underlying portfolio companies in greater detail than they would in traditional funds as part of a careful due diligence process.

And in some cases, they focus their attention solely on those firms that have proven track records – an approach that tends to drive concentration of assets into the hands of a few well-established firms. This pattern is quite common throughout the fund industry.

Fund selectors typically avoid smaller funds, which for economic reasons may not be able to survive the long-term investment horizon that investors usually aim for.

Performance

'It's not simple to assess funds. Past performance is not so important to judge the operating of these companies in the future. We look at the composition of portfolios, the companies that are inside, so we form a personal idea about it. In terms of performance there are different conditions for thematic trends'. Italy, financial adviser

'We tend not to choose asset manager/third parties which have not had a strong track record when it comes to these types of investments'. Singapore, financial adviser

Scale

'We aren't interested in small thematic funds. They need to have enough size for us to invest in them. Sometimes we need to invest €80–100m, and we need a portfolio that is big enough to manage our amounts'. Spain, fund of funds management

- We have identified 1,471 funds globally which are thematic. They represent AuM of €572bn.

Large number, but not unusual.

- The top 20% of these funds by number represent 80% of these assets.

Significant concentration, but again that's not unusual.

- The average size across all these is €388m, but 749 (51%) have AuM of below €100m.

Worrying tail of managers that may not be viable. Again not unusual.

* Morningstar "Good story, bad investment" Alex Bryan Morningstar, September 2020.

**BlackRock - Positioning Thematic Funds in Portfolios, May 2020.

Selectors find that choice is made more difficult by the lack of differentiation in the thematic funds they see. There are too many products that are too similar, we were sometimes told. Some say they want funds that are more specific and stand out from the crowd. One fund selector warned asset managers that they 'lack genuine product innovation', which is ironic given the highly innovative commercial setting in which these funds operate.

Fund selectors also find their selection process made more difficult by the lack of what they often call transparency. This is a word which fund selectors in Europe use in a variety of contexts, and it is a quality they deeply desire. For example, some find the way funds are named to be non-transparent and perplexing. What may appear small details around fund nomenclature can cause real annoyance: sometimes funds are named in ways that make it difficult to understand what they are trying to achieve. What matters is that the theme is clear in the title and consistently reflected in the underlying holdings.

More variety, more specific

'As regards thematic funds, I think the vast majority are not sufficiently differentiated from one another. Essentially, they are all exposed to the same big trends'.
Belgium/Luxembourg, discretionary portfolio manager

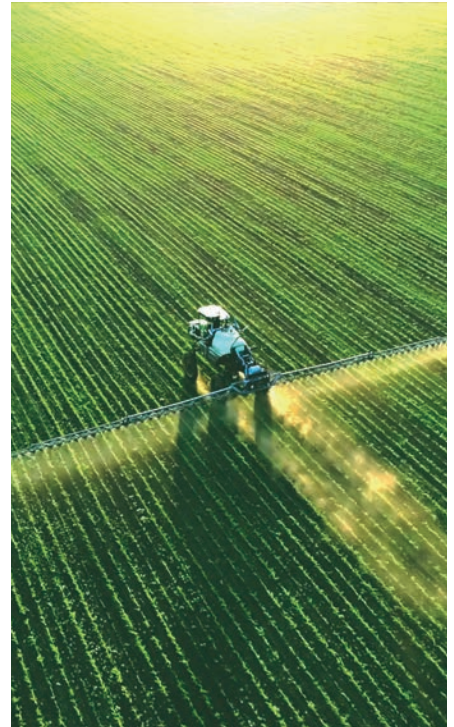
'We are looking for thematic funds that stand out from the crowd – that are not just technology related – and are very specific'.
France, advisory portfolio manager

'You see the same themes being repeated over-and-over again. I don't think that there is much genuine product innovation going on'.
Spain, discretionary portfolio manager

Transparency e.g. naming

'It would be very helpful if providers could ensure that their themed funds are clearly titled, so that the names of the funds clearly reflect the nature of the theme in each case'.
UK, discretionary portfolio manager

'I think that at this early stage in the development of those two trends, there needs to be better transparency from providers, and more-comprehensible benchmarks'.
Switzerland, discretionary portfolio manager



7. Thematics has the potential to transform asset management

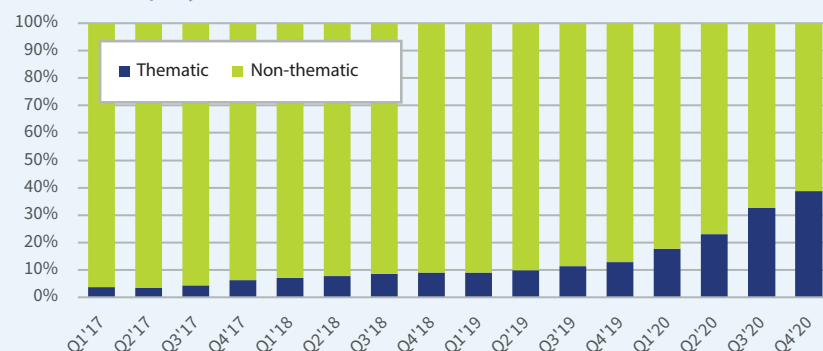
What is the potential for thematic investing to influence the future development of the asset management industry? Well, it has already had a dramatic impact – since 2017, this corner of the industry has represented 39% of all equity fund net sales. It is not unreasonable to think it will continue to play an important role.

Arguably, thematic funds have already transformed the industry. Thematic assets represent a small part of the overall funds market: as a proportion of total fund assets thematics represent just 2.9%* in 2020. However, since 2017 this corner of the industry has represented 39% of all equity fund net sales. It is not unreasonable to think it will continue to play an important role.

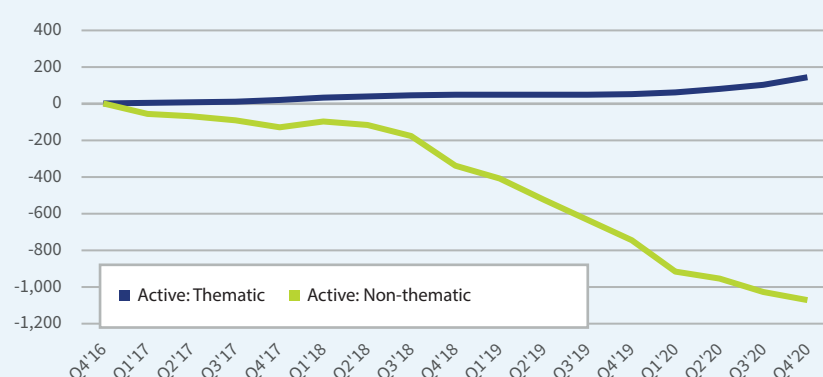
Thematic strategies have certainly provided a role for active equity management at a time when in other parts of the industry, it is being challenged. The active equity thematic funds that we track globally have sold €143bn since 2017. Over this same period the equivalent non-thematic active equity funds across the world have seen net withdrawals of €1.1trn.

We leave the last word on this, appropriately, to the fund selectors. We have been told many times by fund selectors in recent years that thematics may grow in influence and become a more frequently used form of thinking and investing among investment professionals and their clients. Two examples are shown here.

Thematic flows and non-thematic flows
Proportion of cumulative global net flows of non-thematic vs thematic equity funds 2017–2020



Active thematic flows vs active non-thematic flows
Cumulative global net flows of active equity non-thematic vs active equity thematic funds (€bn) 2017–2020



Source: Broadridge GMI Funds, Broadridge Thematics Analysis 2021

An important role in future

'I believe that the current investment trends in favour of ESG-orientated and thematic funds will be the main drivers of change in the fund industry over the next few years'.
Switzerland, discretionary portfolio manager

'Theme funds will create an ever-growing added value within the fund industry instead of traditional index funds or regional funds. Thematic investments will also gain greater significance in the ETF sector'.
Austria, discretionary portfolio manager

* If you widen the total to include all asset classes, equity, fixed income, money market, then thematics represents just 1.3%.

Appendix 1: Definitions

Thematic Macro and Micro theme definitions used in this report

Macro-theme	Micro-theme	Definition
Sustainability	Scarce Resources	'Scarce Resources' captures the opportunity arising from the growing appreciation of the planet's resource needs and the investment opportunities arising from those companies seeking to provide solutions to these challenges. The world's increasing population and the growing demand for clean water ensures that water strategies dominant in this space, however products targeting opportunities arising from other scarce resources also exist, which include nutrition/food and timber.
	Clean Energy	'Clean Energy' captures the opportunity arising from sustainable and renewable energies as the world undergoes its transition towards a low-carbon economy. An increasingly worldwide acceptance of the impact of climate change, strengthened by a number of climate pacts, including the Paris Climate Agreement, have intensified investment opportunities within those companies engaged in the production or enablement of clean energy.
	Clean Living	'Clean Living' captures the opportunity arising from how our way of living is being reshaped to become more sustainable. Opportunities within this micro-theme cluster around the following areas: smart city, circular economy, waste, and electric vehicles/mobility. Smart city, for instance, centres on how cities are turning to sustainable solutions to meet the needs of their residents in order to improve their quality of life, while the circular economy focuses on the opportunity arising the attempt to minimise waste by considering the full life cycle of materials.
	Other Sustainable	'Other Sustainable' captures the opportunity arising from other single and multi sustainable themes, predominantly focused on global climate and environmental issues. Many of the leading products within the sustainable macro-theme are found here as a result of their investment proposition cutting across a number of sustainable micro-themes, i.e. spanning scarce resources, clean energy and clean living.
Emerging Technology	Robotics & AI	'Robotics & AI' captures the opportunity arising from the developments in the robotics and artificial intelligence space, many of which have the potential to revolutionise our way of life. The ability of those companies operating in the robotics & AI spaces to increase productivity, reduce costs and help the world overcome former technological barriers ensures that they have the potential to permanently transform industries. Within this micro-theme, we exclusively place those funds which have an explicit focus on the robotics & AI space within their fund name.
	Disruptive Tech	'Disruptive Tech' captures the opportunity arising from technological advancements that have the potential to displace older technologies, create new markets, and permanently alter the way the world operates. Within this micro-theme, we place those funds which are focused on disruptive, exponential and next generation technology opportunities.
	Other Tech	'Other Tech' captures the opportunity arising from a range of other emerging technology focused themes, which are predominately clustered among security/cybersecurity, fintech, semiconductor, connectivity, and digitalisation opportunities.

Macro-theme	Micro-theme	Definition
Healthy Living	Biotech and Medical Innovation	'Biotech and Medical Innovation' captures the opportunity arising from the rapid advancements occurring within the biotechnology/genetic therapy industries and innovation within the medical space. The impact of COVID-19 on the world has intensified the opportunities within this micro-theme as an increased focus is placed on discovering new innovations which can aide the world in dealing with illness and disease. Please note that we exclude pharmaceutical sector based funds.
	Ageing Demographics	'Ageing demographics' captures the opportunity arising from the growing recognition of the need to address the challenges of the world's aging population, a result of both increasing life expectancy combined with a decreasing fertility rate. Funds targeting the opportunities within this micro-theme invest in those companies which stand to gain from these worldwide demographic evolutions, e.g. through the provision of product or services for the elderly.
	Other Health	'Other Health' captures the opportunity arising from other healthy living themes. Products in this space are predominantly either focused on broader health and wellness issues, or on the digital health space.
Changing Consumption	Emerging Wealth	'Emerging Wealth' captures the opportunity arising from sources of emerging wealth, most notably contained within Chinese/Asian consumers as billions of people makes the transition from poverty towards middle class status and create a rapidly accelerating source of demand. A separate emerging wealth opportunity also exists within the 'millennial' generation, who are experiencing an acceleration in purchasing power, in part as a result of intergenerational transfers of wealth.
	Other Consumption	'Other Consumption' captures the opportunity arising from broader consumer trends and innovations, such as within the growth of e-commerce, the development of electronic payment systems, and changing consumption patterns.
Multi-theme	Multi-theme	'Multi-theme' captures strategies which combine a number of themes together within one strategy. At a minimum this will be across two macro-themes, however frequently will target opportunities cutting across the full suite of themes within the overall thematic landscape.

Source: Broadridge Thematics Analysis 2021

Thematic Macro and Micro theme definitions used in this report

Broadridge Global Market Intelligence (GMI) platform draws together assets and flows on 91,000 global funds and underpins our thematic dataset.

Our SalesWatch dataset, a component of GMI, is the leading dataset for analysing the global cross-border fund market and enables geographical disaggregation for over 70% of the cross-border market. This dataset is accordingly used to split out fund flows and assets for cross-border funds, allowing us for example to distinguish between APAC and European buyers of cross-border funds.

Our FundFile dataset, another component of GMI, provides comprehensive coverage on domestic fund markets and is used as the basis for attributing flows and assets for domestic thematic funds. An Italian domestic fund would, for example, fall into Europe, while a US domestic fund by contrast would naturally fall into N. America.

For those cross-border funds not captured by our SalesWatch data, following examination of the business of the managers within this category as well as the strength of the domestic markets within APAC and N. America, we placed these within our Europe segment, where they are labelled as 'cross-border undefined'.

Using this methodology, we therefore segment the geographical landscape into three components: APAC, N. America, and Europe.

The major players within 'Asia Pacific' are both China and Japan, while Australia, Taiwan, Hong Kong, South Korea, and Singapore are also notable markets within this region.

'North America' is overwhelmingly dominated by the US market, however Canadian assets have started to develop quickly from a very low base

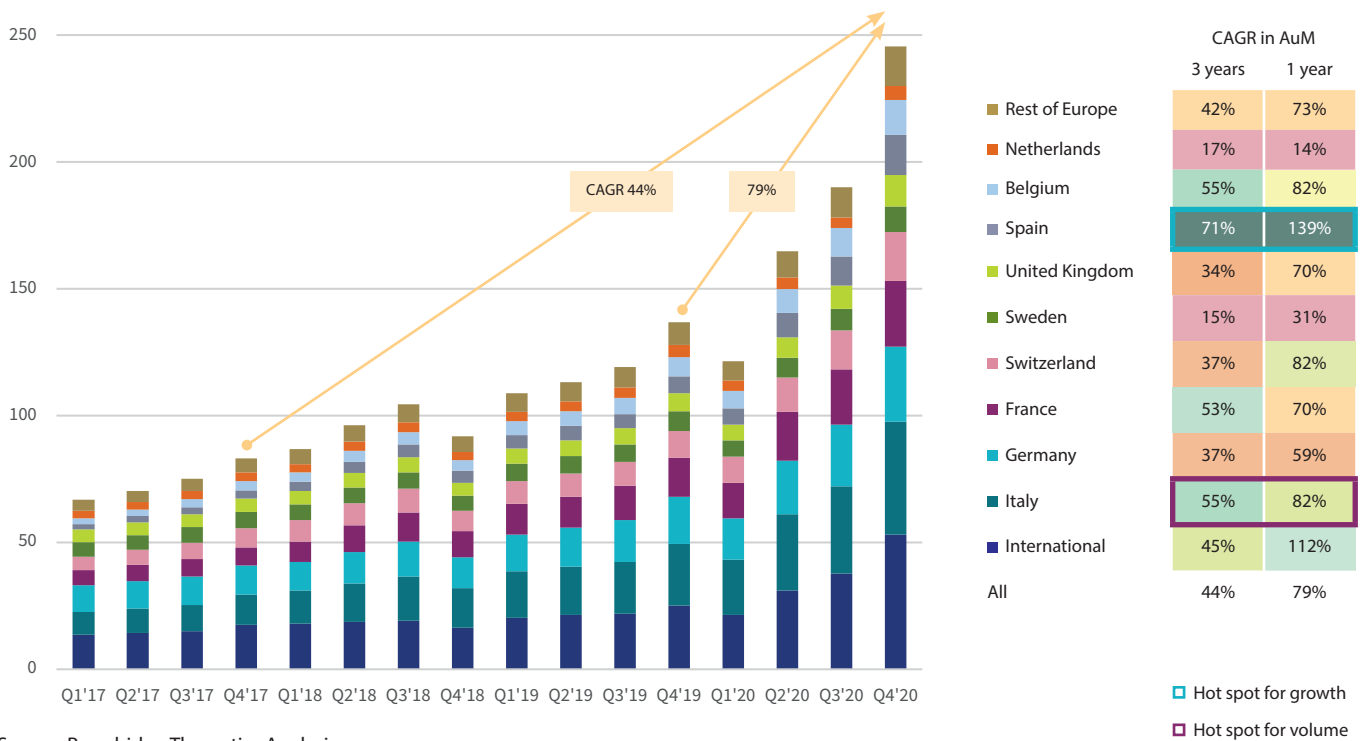
Within Europe, the bulk of assets are held among the likes of Italy, Germany, France, Switzerland, Spain, Belgium, UK, and Sweden. Eastern Europe countries, such as Russia, are also included within the Europe segment but constitute an extremely slender portion of it. We have also included Middle East and Africa (MEA) within Europe as a result of the very small amount of assets held by countries here. As explained above, within Europe we also place 'cross-border undefined'.

Appendix 2: Regional Fact Sheet (Europe)

Key features

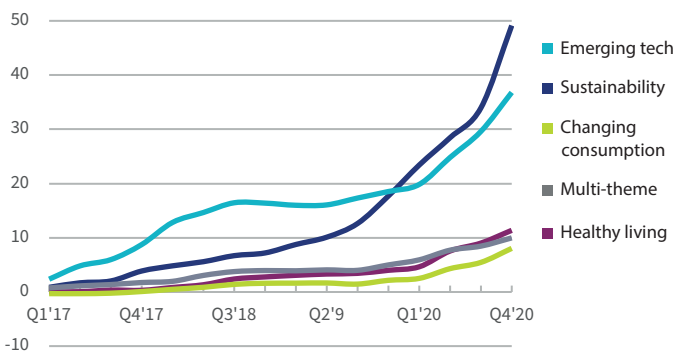
- Long-term growth of interest in thematics in Europe observed since 2015.
- Hot spot of growth is Spain, while the largest identified regional volume is Italy.
- Sustainability is the largest macro theme, followed by emerging tech.
- By micro theme, 'Other' sustainability funds (mostly multi-thematic) show highest cumulative flows.

European thematic fund growth AuM in thematic funds 2017–2020 (€bn)



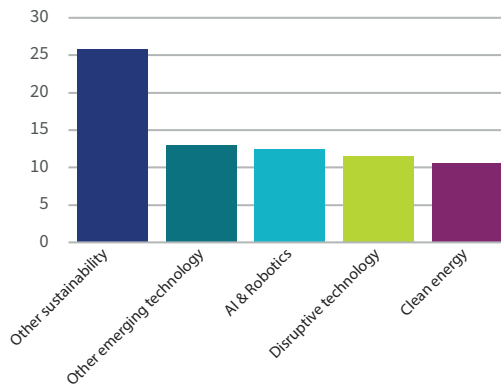
Source: Broadridge Thematics Analysis 2021

European thematic flows by theme Cumulative thematic fund net flows 2017–2020 (€bn)



Source: Broadridge Thematics Analysis 2021

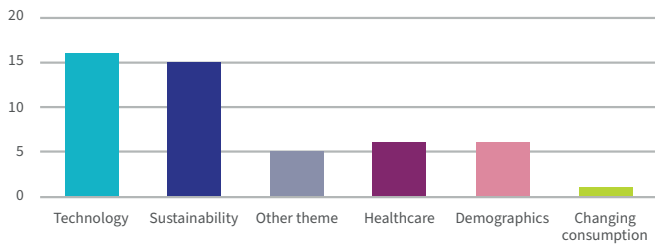
Top European thematic micro themes Top 5 micro-themes by aggregate flow 2017–2020 (€bn)



Source: Broadridge Thematics Analysis 2021

European thematic preferences

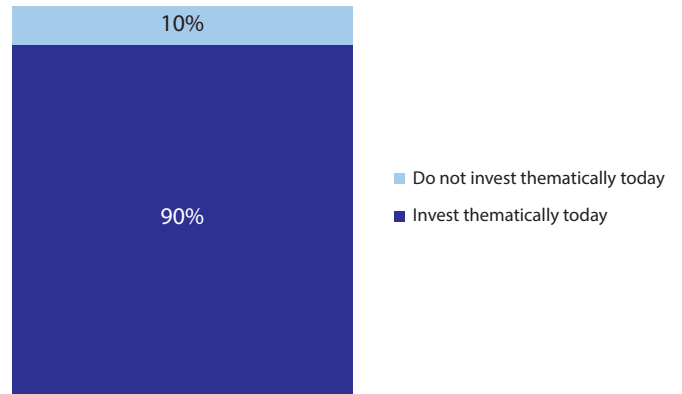
Structural megatrends that will define the economy and society over the next 10 years. Unprompted number of mentions by those responding in a thematic manner. Respondents could provide multiple trends.



Source: Broadridge survey of 90 fund selectors 2021

Thematic thinking and investing in Europe

Conclusions from survey of 90 fund selectors



Source: Broadridge survey of 90 fund selectors 2021

Examples of European thematic thinking

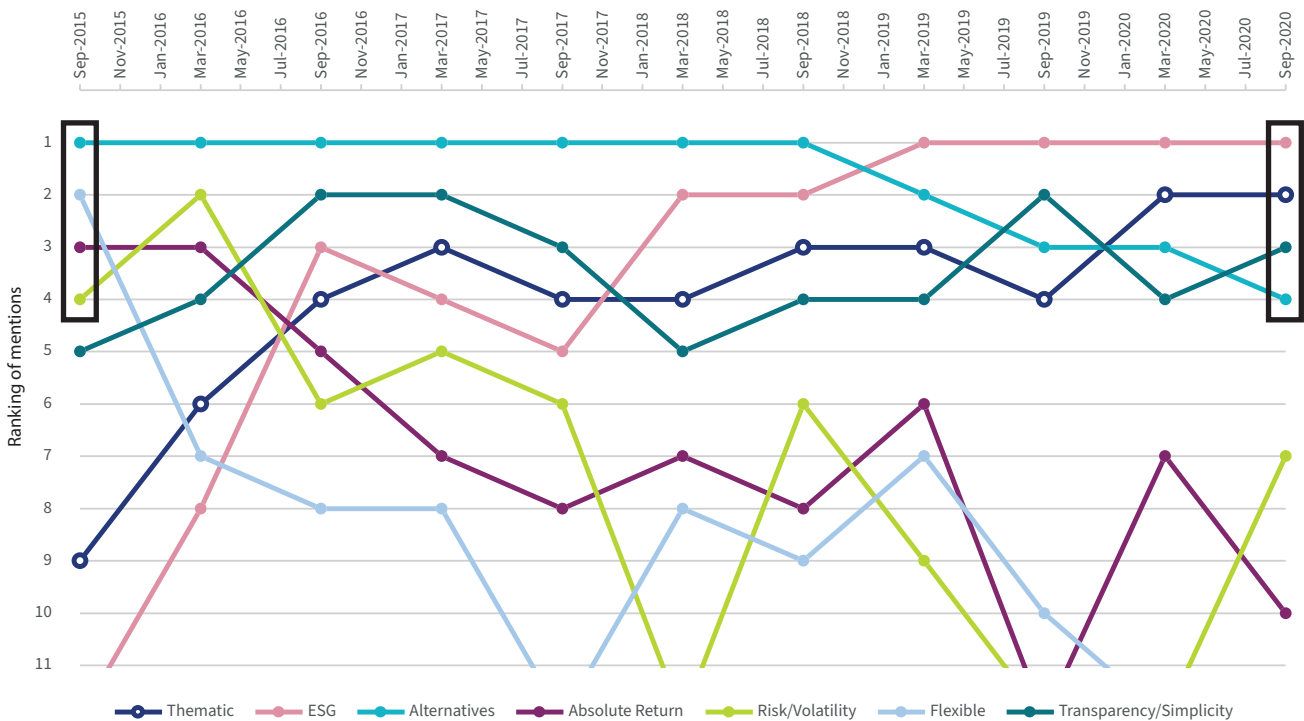
'Some of the megatrends which will be with us for time to come are healthcare, health tech, fintech, electric vehicles. I see data exploitation by big corporates. Also, climate change of course'
Germany, fund of funds management

Switch from old school approaches

'You have to switch from these old school approaches. Sometimes it's wrong to put BMW and Tesla in the same category. Times change and maybe we have to change our ideas'
Germany, fund of funds management

European fund-related future needs

A selection of top fund-related future needs expressed by European fund selectors 2015-2020
Selection: the top 4 in 2015 and the top 4 in 2020



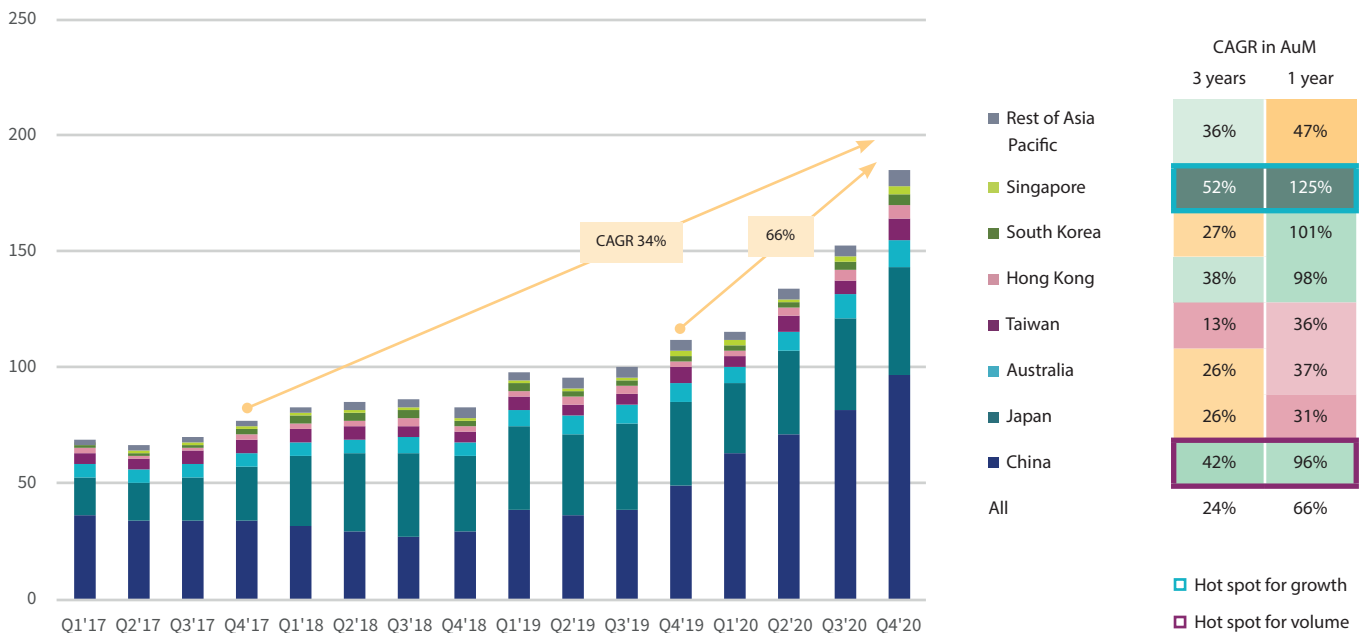
Source: Broadridge Fund Buyer Focus, Product Innovation Perspectives

Appendix 3: Regional Fact Sheet (Asia Pacific)

Key features

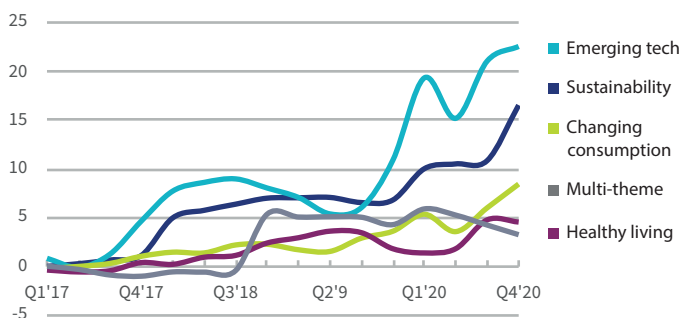
- Significant growth in thematic interest across Asia Pacific but demand is volatile and changing.
- Largest country by flow and volume is China, as a result of significant rise in flows since 2019.
- Emerging tech is the largest macro theme in terms of flows, followed by sustainability.
- By micro theme, 'Other' technology* and disruptive tech funds show highest cumulative flows.

Asia Pacific thematic fund growth Thematic fund AuM 2017–2020 (€bn)



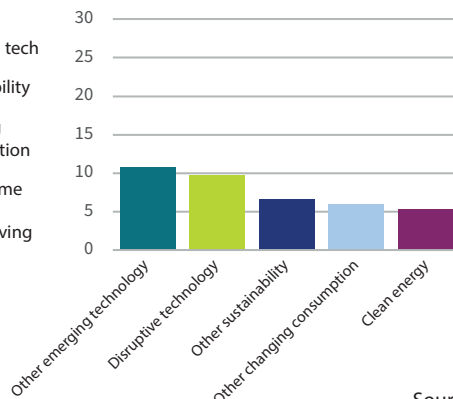
Source: Broadridge Thematics Analysis 2021

Asia Pacific thematic flows by theme Cumulative thematic fund net flows 2017–2020 (€bn)



Source: Broadridge Thematics Analysis 2021

Top Asia Pacific thematic micro themes Top 5 micro-themes by aggregate flow 2017–2020 (€bn)

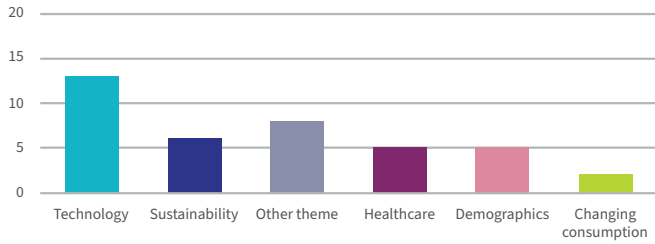


*'Other' tech captures the opportunity arising from a range of other emerging technology focused themes, which are predominately clustered among security/cybersecurity, fintech, semiconductor, connectivity, and digitalisation opportunities.

Source: Broadridge Thematics Analysis 2021

Asia Pacific thematic preferences

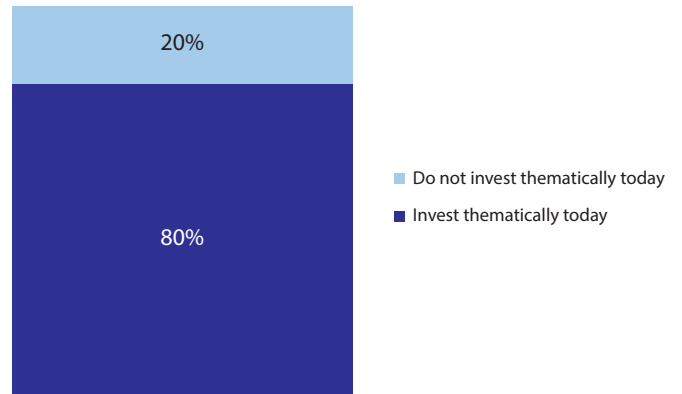
Structural megatrends that will define the economy and society over the next 10 years. Unprompted number of mentions by those responding in a thematic manner. Respondents could provide multiple trends.



Source: Broadridge survey of 90 fund selectors 2021

Thematic thinking and investing in Asia Pacific

Conclusions from survey of 90 fund selectors



Source: Broadridge survey of 90 fund selectors 2021

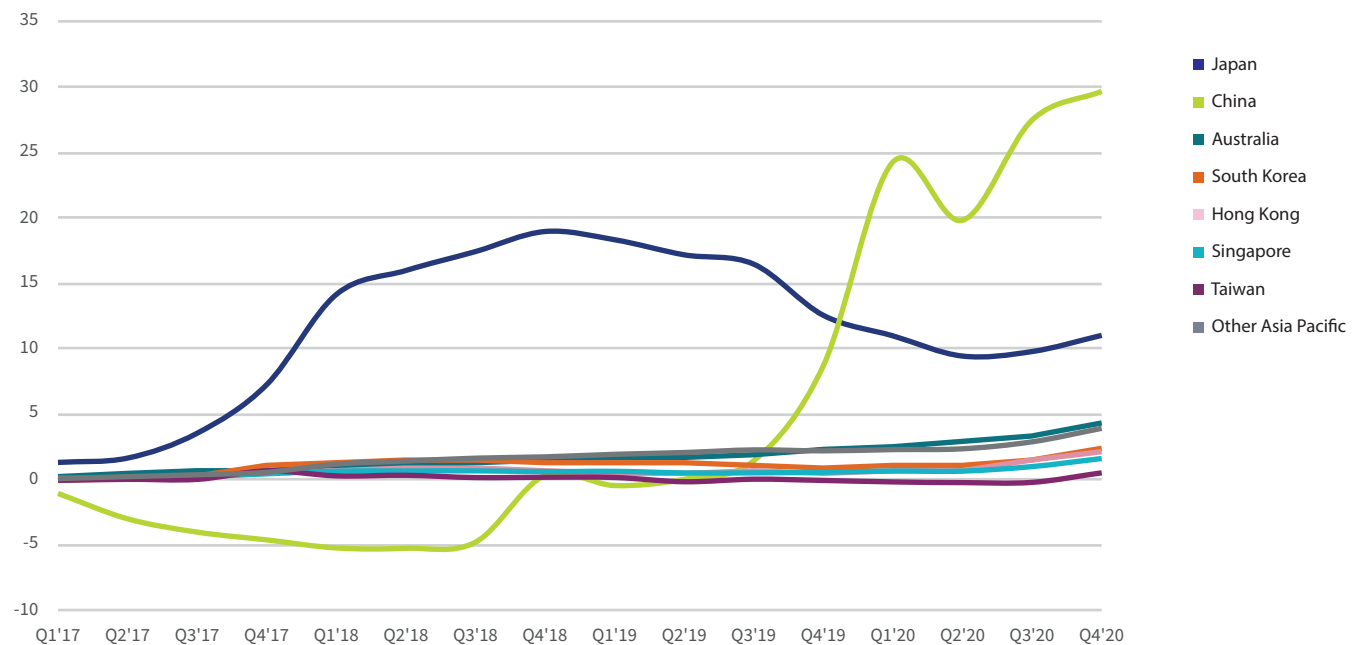
Examples of Asia Pacific thematic thinking

'I am optimistic about big data, artificial intelligence, packaging equipment, new materials, new energy, traditional Chinese medicine and other favorable areas of national policies'.
China, retail bank

'Softbank Group has many different businesses, and it is difficult to choose which sector it falls into. It's a very traditional company but since the business management is changing, its classification will be outdated. We shouldn't be tied to sectors'.
Japan, wealth manager

Asia Pacific thematic flows by country

Cumulative thematic fund net flows 2017–2020 (€bn)



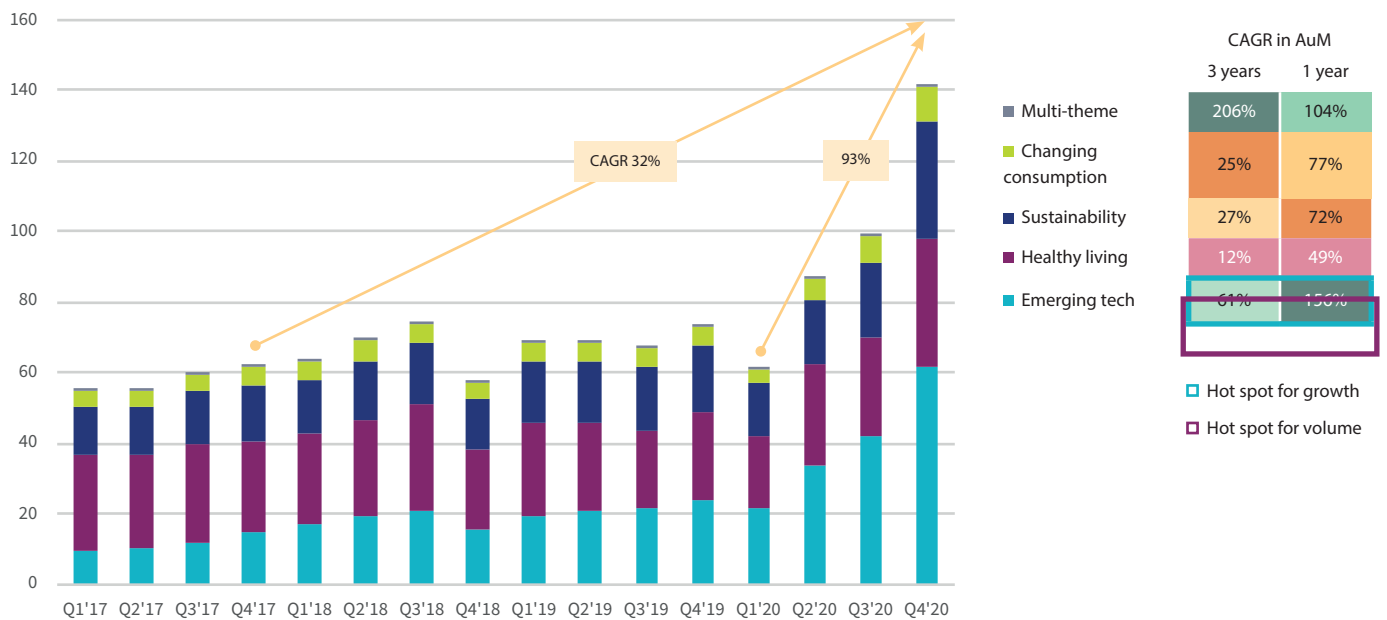
Source: Broadridge Thematics Analysis 2021

Appendix 4: Regional Fact Sheet (North America)

Key features

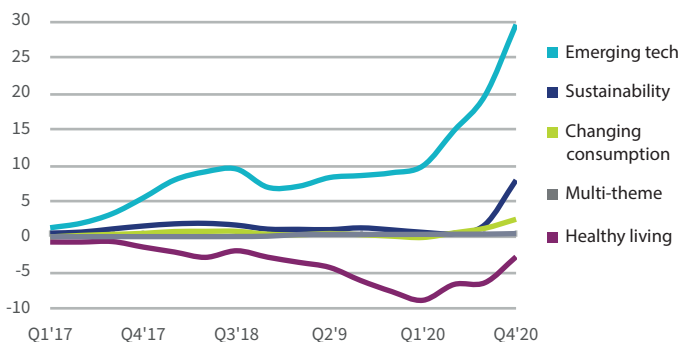
- Growth largely driven in 2020 by interest in emerging tech themes.
- The largest flow is into the micro theme 'Other' tech which includes security/cybersecurity, fintech, semiconductor, connectivity, and digitalisation opportunities.
- The micro theme with most AuM is medical innovation and biotech, but this will soon be overtaken by tech themes.

North America thematic fund growth by Macro theme AuM in thematic funds 2017–2020 (€bn)



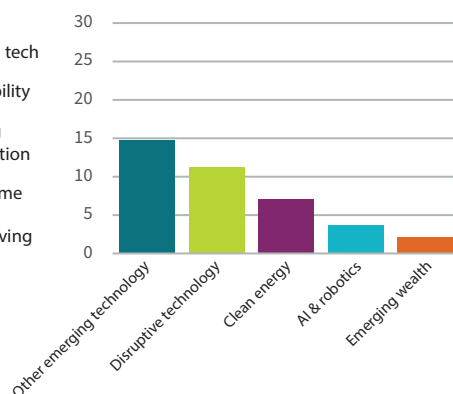
Source: Broadridge Thematics Analysis 2021

North America thematic flows by theme Cumulative thematic fund net flows 2017–2020 (€bn)



Source: Broadridge Thematics Analysis 2021

Top North American thematic micro themes Top 5 micro-themes by aggregate flow 2017–2020 (€bn)

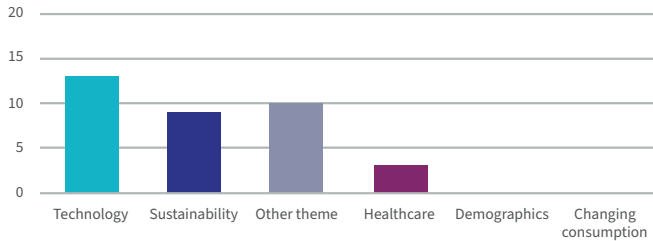


*'Other' tech captures the opportunity arising from a range of other emerging technology focused themes, which are predominately clustered among security/cybersecurity, fintech, semiconductor, connectivity, and digitalisation opportunities.

Source: Broadridge Thematics Analysis 2021

North America Thematic preferences

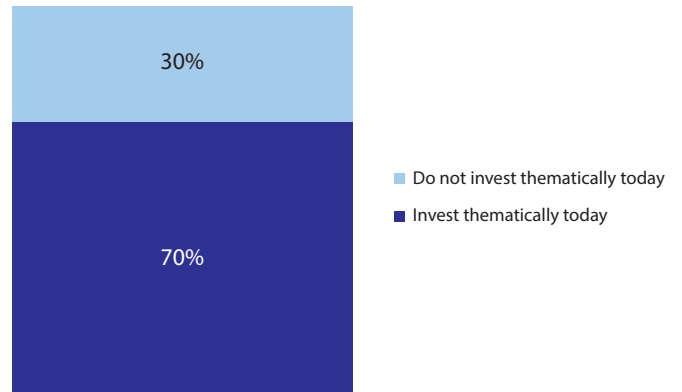
Structural megatrends that will define the economy and society over the next 10 years. Unprompted number of mentions by those responding in a thematic manner. Respondents could provide multiple trends.



Source: Broadridge survey of 90 fund selectors 2021

Thematic thinking and investing in North America

Conclusions from survey of 90 fund selectors



Source: Broadridge survey of 90 fund selectors 2021

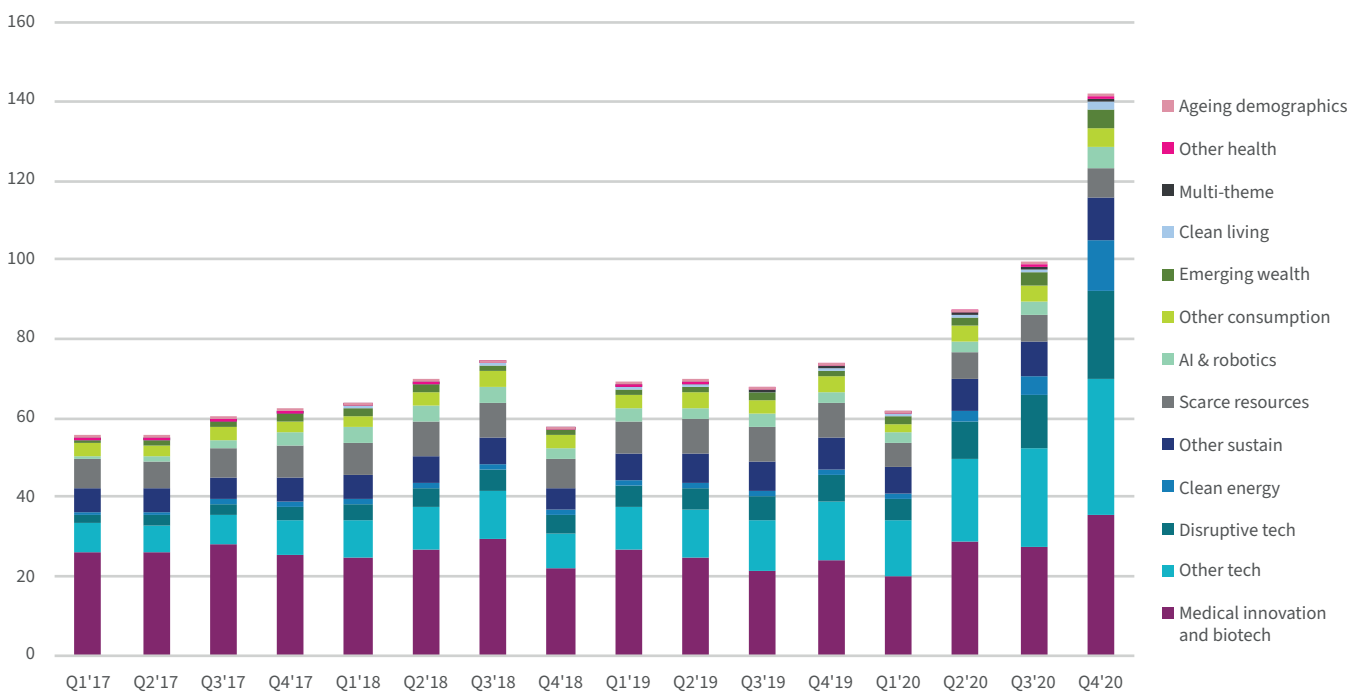
Examples of North America thematic thinking

'One big megatrend that we see is a continuing shift towards technology, automation, more distributed work versus centralized work; transitions in transportation and more autonomous vehicles, more robotics, again, more technology at all levels throughout the economy'.
US, financial planner

'I think last year was probably the dawn of this remote economy where you are going to see a lot more tech-based, service-based economy. And the elimination of the big box store and the traditional retail environment, and a transition into a more web-based economy and environment'.
US, wealth adviser

North America thematic assets by micro theme

AuM in thematic funds 2017–2020 (€bn)



Source: Broadridge Thematics Analysis 2021

This is for informational purposes only and does not constitute an offer to buy or sell any investments, products or services and should not be considered as a solicitation, or as investment, legal or tax advice.

Opinions, estimates and forecasts herein are subjective and subject to change without notice. There is no guarantee forecasts made will come to pass. No guarantee, warranty, or representation is given as to the accuracy or completeness of this material. Reliance upon information in this material is at the sole discretion of the reader. This material does not contain sufficient information to support an investment decision.

Issued in the U.K. by AXA Investment Managers UK Limited, which is authorised and regulated by the Financial Conduct Authority in the U.K. Registered in England and Wales, No: 01431068. Registered Office: 22 Bishopsgate, London, EC2N 4BQ.

© AXA Investment Managers 2021. All rights reserved