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Investment themes Q4 2021 update



The COVID-19 pandemic has caused a variety of new and existing socio-economic trends to accelerate. Investors have quickly responded to these shifts by allocating increasing amounts of capital into related thematic investments. In our view, thematic investing can offer a targeted approach as returns moderate in a maturing market cycle.

Recent market events have meant some of our structural themes have faced performance challenges in Q3. However, we expect this to be temporary given still-supportive business and regulatory momentum and an ongoing shift in investor demand.



We retain our conviction in the Sustainability, Innovative Disruption, and Yield-Free Risk structural themes which remain attractive going into Q4 2021.

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Senior Cross-Asset Strategist

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Cross-Asset Strategist

Overview of our Structural themes



The past quarter was a challenging one for risk assets, with global equities falling, dragged lower by Asia ex-Japan which was down over 9%. China's regulatory tightening, concerns over the revival of the Delta variant, central banks' tightening and a stronger US dollar proved to be a detrimental mix for global equities and some of our structural themes over the quarter.

Among our structural themes, climate investing continued to face a bumpy ride (with our water theme being a notable exception), despite supportive business and regulatory momentum towards mitigating climate change. Within our Disruptive Innovation theme, Fintech and Electric vehicles (EVs) delivered positive returns since their respective initiation dates, but Online gaming and Internet of things faced headwinds from China's regulatory crackdown and woes from supply chain bottlenecks, which impacted top-line growth and revenues among 5G and semiconductor companies.

We closed our preferred view on Online gaming and Medical technology this month, on the back of regulatory headwinds in China and stalling earnings upgrades, respectively. Beijing's halt on approval for new games and

limitation on play hours allowed to Gen Z users represents a difficult monetisation problem for online gaming companies. In the case of Medical technology, as economies move past the recent Delta variant-led shutdowns, telemedicine services will likely take a backseat to elective medical procedures and traditional healthcare services.

We also re-classify EVs to the Climate Investing structural theme. We believe this classification is a better reflection of the theme. EVs are expected to play a major role in governments' efforts to reduce carbon emissions and mitigate climate change.

Going forward, these thematic update publications will provide updates for structural themes, while updates on our cyclical macro themes (Race for income, USD to weaken, Value vs growth equities) will be communicated via our monthly Global Market Outlook.

In this update, for these structural themes, we review notable macro developments over the quarter, performance of our existing themes and their outlook for the rest of the year.

Positive returns



Fintech



Electric Vehicles

Closed sub-themes



Online Gaming



Medical Technology

Re-classify EVs to Climate Investing



Electric Vehicles

Infrastructure push

Government policies have been a significant tailwind across most of our themes within Climate Investing, Disruptive Innovation and Yield-Free Risk.

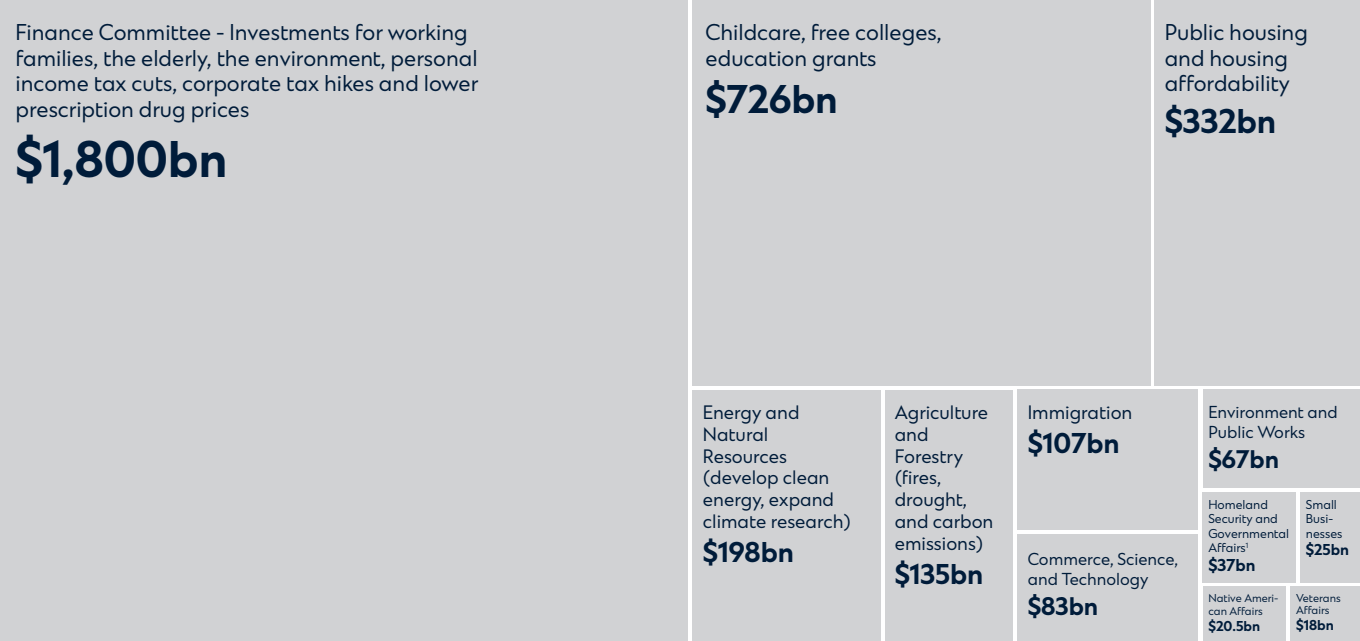
During the quarter, the Federal Reserve (Fed) signalled it could hike rates a number of times by the end of 2024, based on its ‘dot plot’. Having said that, this would still imply a low or negative real (net-of-inflation) interest rate environment for the next few years. This means the last few years’ trend could continue, with investors increasingly forced to take on more risk and/or seek alternative sources of returns in a bid to generate higher yields and returns. This benefits our Yield Free Risk theme, which builds off low expected future returns across major asset classes.

On the fiscal policy front, the US Senate passed the USD 1.2tn bipartisan Infrastructure proposal in August. This includes USD 550bn of additional spending on transit, clean energy, water and digital infrastructure, supporting our Climate and Disruptive Innovation structural themes.

There is a further USD 3.5tn Build Back Better proposal, which we expect will be watered down, but eventually be passed, over the coming months, providing further tailwinds to our themes. For example, part of the USD 3.5tn bill includes a USD 198bn clean energy plan that would reward utilities who increase energy production from renewables and penalises those which do not, benefitting Renewables within our Climate theme.

We expect a watered-down Build Back Better bill to be passed eventually

Breakdown of the USD 3.5tn reconciliation package



Source: Democrats.Senate.gov, Standard Chartered

1 Homeland Security and Governmental Affairs (electrifying the Federal vehicle fleet, cybersecurity)



COP 26 a key catalyst to accelerate climate action

Looking ahead, the upcoming United Nations Climate Change Conference of the Parties (COP26) from 31 October to 12 November 2021 will be key. The COP26 summit – delayed a year due to the pandemic – will bring parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change.

The main objectives of the conference are to:

1. secure global ‘net zero’ by mid-century and limit global temperature increases to under 1.5 degrees Celsius;
2. adapt infrastructure and defence systems to protect communities and natural habitats;
3. mobilise finance and;
4. work collaboratively to deliver the above results.

Successful cooperation at COP26 could result in an acceleration of climate policies aimed at a reduction of emissions as well as higher penetration of renewable energy sources. This would drive more disclosure, more targeted regulation, and enhance the credibility of corporate climate strategies.

EU taxonomy in 2022 to offer greater clarity

Given the increased focus on sustainability over the past few years, there is a need for further clarity on what ‘sustainability’ truly embodies in order to combat issues such as greenwashing. The implementation of the EU Green Taxonomy in 2022, therefore, offers a classification system. This is likely to further support the renewable energy and water components of our Climate theme. Moreover, apart from the environmental impact, water is increasingly being perceived as an essential infrastructure piece from a social impact perspective.

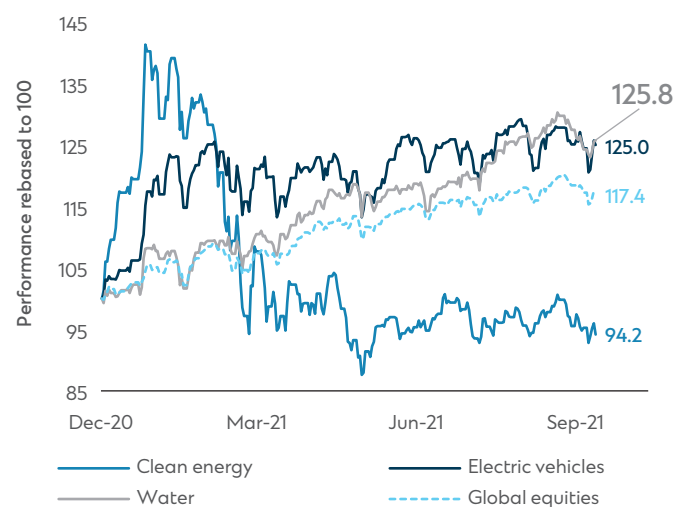
Climate initiatives will likely continue to be a focus of private sector firms as shareholder demand for greater climate action by companies remains robust. This, in turn, could support strong investment performance, particularly for energy transition enablers and water-related industries over a multi-year horizon.

A tougher ride for 'green' themes in markets

Amongst the sub-themes available in our Climate theme basket, the water theme has performed consistently well, gaining through the year. However, clean energy, particularly solar and wind, continue to face a bumpy ride.

Valuations for water and clean energy remain expensive (forward price/earnings of 28.7x and 29.4x respectively) while EV valuations sit at more reasonable levels (forward P/E of 19.9x). The latter two sub-themes may experience some pressure given their sensitivity to rising bond yields. Meanwhile, water-related stocks benefit more from a reflationary, pro-cyclical economic environment and are currently supported by a higher pace of earnings revisions (See chart on page 7).

The water sector has performed well this year, while clean energy has pulled back

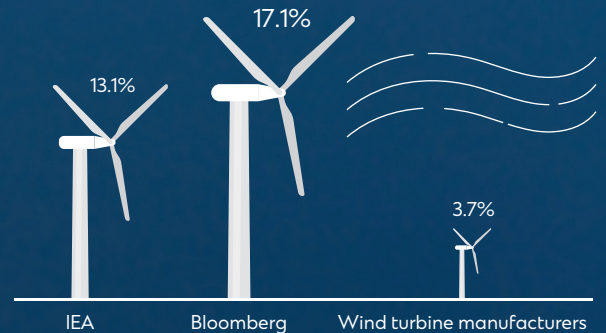


Source: Bloomberg, Standard Chartered



Net zero scenarios imply much faster growth

Expected Compound Annual Growth Rate (CAGR) for wind capacity additions between 2021- 2030 and leading Wind turbine manufacturers revenue between 2021-2023



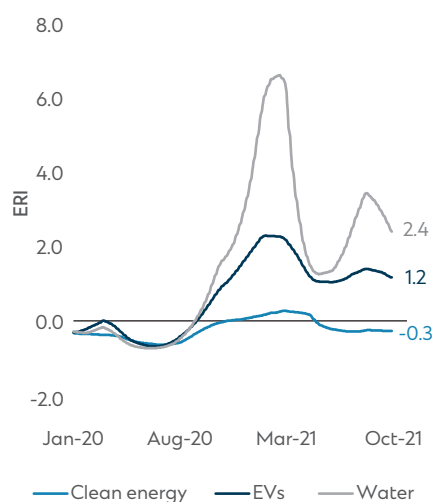
Source: Bloomberg, Standard Chartered

IEA: The International Energy Agency

Wind turbine manufacturers data is an average of consensus revenue CAGR expectations for the top 3 turbine producers as of 2020 (Siemens Gamesa, Vestas and Goldwind)

Earnings revisions for the water sector remain elevated

Earnings Revision Indices (ERI); 2020-2021



Source: FactSet, Standard Chartered
ERI calculated as No. of EPS upgrades / No. of EPS downgrades - 1

Earnings revisions positive for EV and water

Earnings revisions for EVs are also positive. These indicate that analysts are, in aggregate, revising earnings expectations higher. Earnings revisions remain marginally negative for clean energy, though the pace of decline has stabilised over the month. Increased competition, supply chain bottlenecks and high raw materials costs have negatively impacted revenue growth and hit profit margins particularly for solar and wind renewable energy companies. The year-to-date run-up in prices of raw material such as polysilicon (c. 160%) and steel (c. 70%) have led consensus to revise down earnings estimates for clean energy.

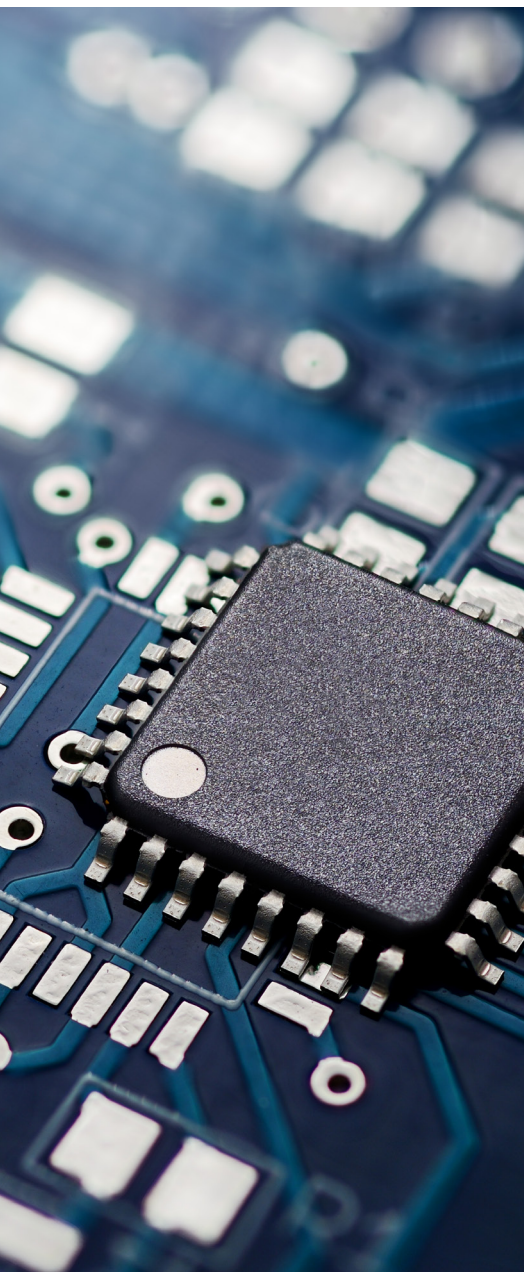
Looking ahead, we expect supply chain bottlenecks to abate over the coming quarters, while a faster-than-expected expansion in renewable demand will likely mitigate potential profit pressure.

For example, to meet the net-zero target, the wind industry will need to expand at 13% CAGR through 2030 according to the IEA. However, consensus sales expectations of wind companies are rather subdued, with potential upside demand surprise emanating from potentially faster-than-expected implementation of net zero initiatives and from the implementation of the EU's EUR 800bn recovery program, which requires 37% of funds to be spent on climate-related projects.

We believe the structural long-term drivers for these themes remain intact and present attractive opportunities for investors.

Acceleration in digital transformation

The ongoing supply chain bottlenecks and labour supply shortage is accelerating companies' efforts to automate and digitise.



As economies begin to recover, companies may well spend more on digital products and services with cloud, software and hardware upgrades, digital payment and security software potentially the targeted areas of investment. Within the Disruptive Innovation structural theme, we continue to favour 5G/ Internet of things (IoT) and Fintech.

Benefitting from policies and rising capex plans

Public policies, such as the US infrastructure plan or China's ongoing USD 1.4tn digital infrastructure plan, aim to grow and develop digital infrastructure to support new technologies, faster connectivity (5G) as well as robotic automation. IoT and robotics investable benchmarks typically consist of a mix of industrial and manufacturing firms, together with high-tech companies, making for a more balanced investment mix relative to other sub-themes.

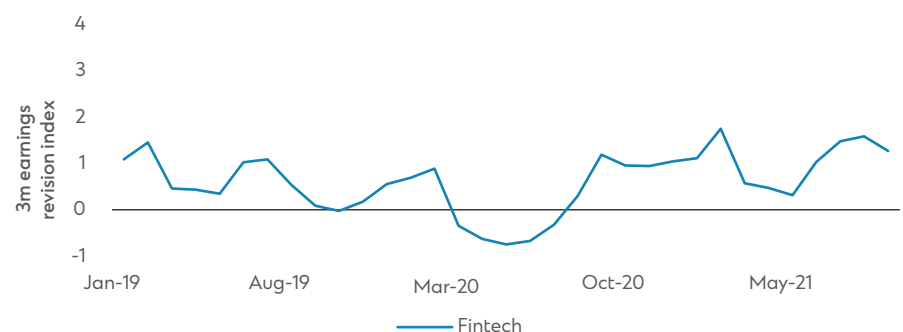
Automation and Robotics may experience tailwinds from increasing CapEx plans by industrial and manufacturing firms across the globe as labour supply continues to shrink and firms seek improved margins by scaling and automating production.

Semiconductors are at the center of virtually all technological developments. Tight demand/supply dynamics for semiconductors are likely to persist into 2022, especially for more mature-node chips (chips that play the foundational role in ensuring the basic functioning of electronic devices and systems) which are used by EVs and 5G. Capacity expansion among mature technology chips remains slow, potentially prolonging the demand-supply imbalance. Consensus expects 18% EPS growth for the sector over the next 12 months.

Average forward P/E valuations at c. 29x remains expensive for broad benchmark indices, as measured by the Stoxx Global Automation & Robotics Index and Indxx Global Internet of Things index, but upward earnings revisions continue to outpace downward revisions by a factor of 1.5x, thus supporting the valuation premium.

Fintech continues to see upgrades to earnings estimates

Indxx Global Fintech index earnings revisions index (ERI)



Source: Factset, Standard Chartered
ERI calculated as No. of EPS upgrades / No. EPS downgrades - 1



Continued investment flows into Fintech

Fintech companies are challenging incumbent universal banks, with cheaper digital payments, peer-to-peer lending and even low-cost robo-advice. Global fintech investments continued to rebound in 1H 2021, rising from USD 87bn in H2 2020 to USD 98bn in H1 2021 (i.e. 12% growth in 6 months, according to KMPG). On that front, VC investments made by corporates comprised USD 21bn as financial services continue to race toward digitalisation of their platforms.

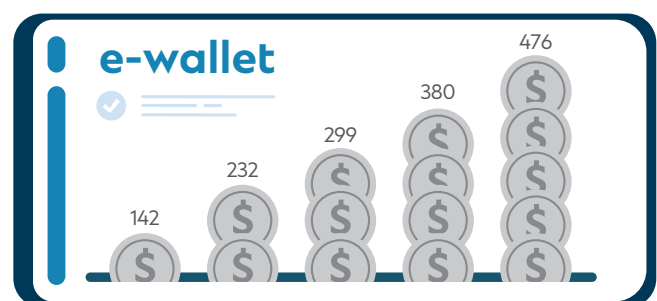
Moreover, Fintech firms benefit from Gen Z adoption. According to BCA Research, Gen Z has a strong preference for seamless connectivity, online banking, and digital wallets. They have also been early adopters of semi-autonomous digital and non-traditional banking and insurance.

Crypto currently represents about 5% of the benchmark. Fintech has benefitted from the growth in the crypto ecosystem – from cryptocurrencies and trading platforms to Non-Fungible Tokens, alternative asset trading, and support structures.

Forward valuations for the Fintech theme are elevated with a P/E multiple of 36.8x. Upward earnings revisions, though, continue to outpace downward revisions 1.3 to 1. Flows into Fintech ETFs continue to grow, according to Bloomberg, with an increase of 50% in Asset Under Management (AUM) over the past 12 months.

Digital wallets for e-commerce set to grow 35% annually from 2019-2023

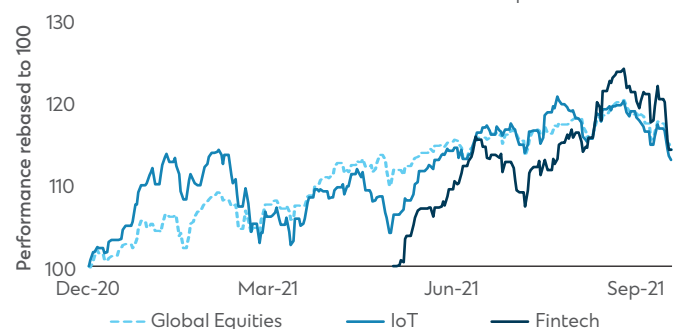
Digital wallet e-commerce wallet volume (USD bn)



Source: Bloomberg, eMarketer, Standard Chartered
A: Actual; E: Expected

Innovation themes' sensitivity to increasing bond yields make for volatile returns

Performance of innovation themes since inception



Source: Bloomberg, Standard Chartered
Fintech theme inception on 14 May 2021

In a world of ‘yield-free risk’

Intensifying Fed taper talk and the sell-off in China property bonds have sent global bond yields higher, improving the income potential of various asset classes.

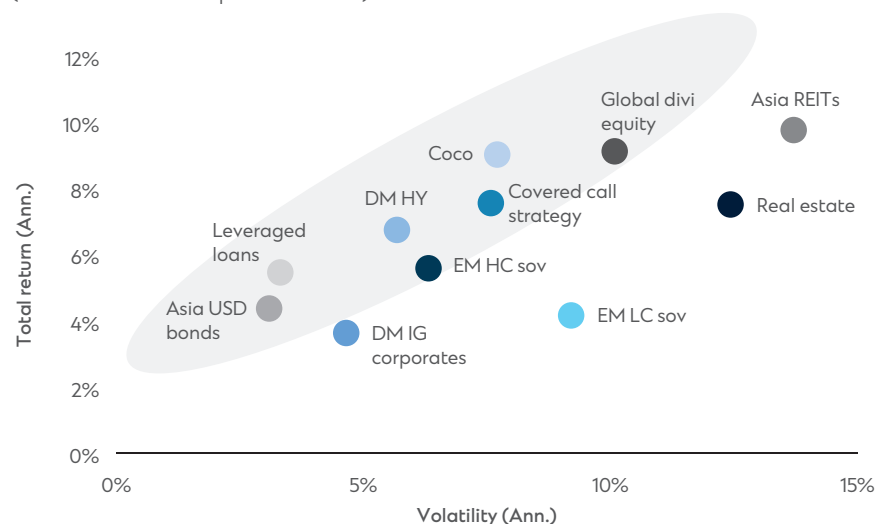
With USD 15tn in negative yielding debt, though, and valuations remaining rich across many asset classes, investors continue to face a daunting task to generate long term investment returns.

The depressed level of yields globally has been a key driver for investors to move up the risk curve across and within assets to generate income and returns. We continue to emphasise that it is important to properly assess the risk and return trade-offs to achieve the desirable yield and returns to avoid taking excessive risks.

Under the yield free risk theme, we advocate investors to consider 1) increasing exposure to risky and/or higher yielding assets (i.e. dividend equities, or bonds with lower credit quality or longer duration), 2) making use of leverage, within sensible bounds, and/or 3) exploring alternative, less-liquid assets such as hedge funds or private investments to capture opportunistic sources of diversification, income and returns.

DM HY and global leveraged loans offer some of the best risk-adjusted returns in rising inflation scenarios

Risk/return trade-off across income assets when inflation is expected to rise (since 2005 or inception to 2021)



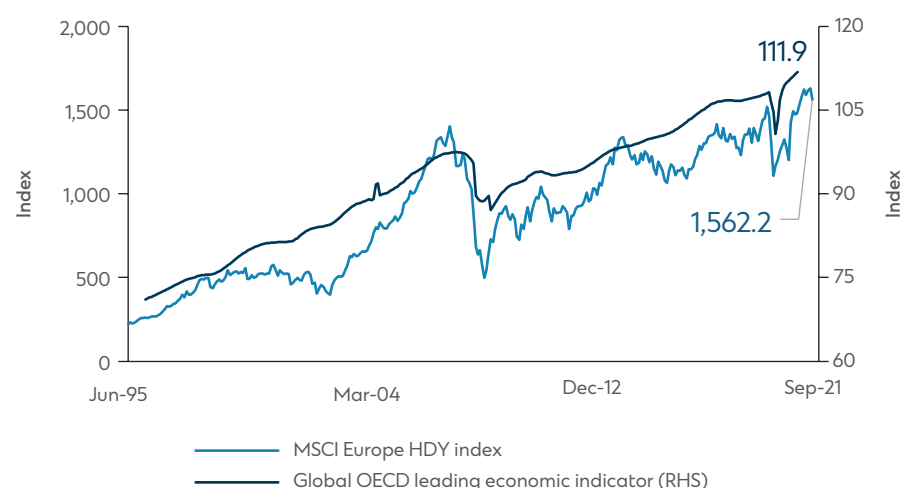
Source: Bloomberg, Standard Chartered
Refer to Explanatory notes related to Contingent Convertibles at the end of this document.
Legend: HC = Hard Currency; LC = Local Currency

Since our 2021 outlook, such strategies i.e. alternative and private investments, High Dividend Yielding (HDY) equities and riskier bonds, have generally delivered positive returns (see appendix). In our view, these will continue to play a significant role for investors to enhance their returns, considering the still-depressed long term expected returns from traditional asset classes. We highlight two particular asset classes investors can take advantage of:

- **High dividend yielding (HDY) equities:** High dividend equities tend to perform well during periods of rising inflation. We maintain our conviction towards dividend equities for three reasons: (1) Current valuations remain attractive, with yields comparable to many fixed income counterparts; (2) DM growth outlook remains favourable, supporting the potential for capital appreciation for dividend equities which are largely US- and Europe-focused.
- **Private markets:** They represent one potential opportunity for investors to enhance their returns and income potential against a backdrop of low bond yields and elevated equity valuations. Moreover, as private investments require commitments over long time frames, and often require capital to be locked, they can achieve extra returns thanks to an 'illiquidity premium'. Lastly, private investments display lower correlation and volatility levels due to less frequent transactions and can therefore 1) improve risk-adjusted returns of a portfolio, and 2) mitigate investors' emotional response to market swings.

Europe HDY equities are likely to perform well on the back of a robust global growth outlook

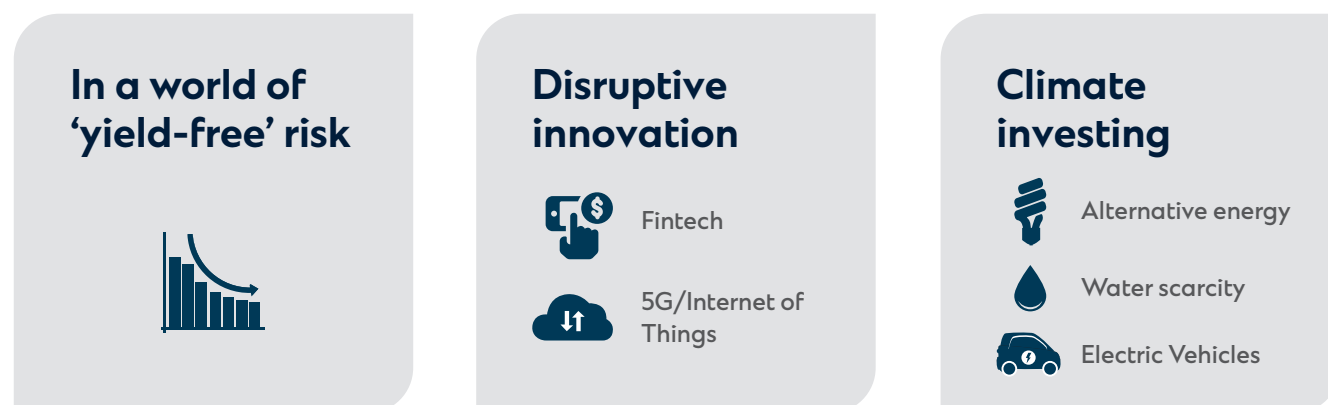
MSCI Europe HDY vs. Global leading economic indicator



Source: Bloomberg, Standard Chartered

Appendix

Overview of themes for Q4 2021 - **Structural themes**



Source: Standard Chartered

Our assessment of drivers and indicators

Thematic investing is multi-faceted across regions, sectors and time horizons. Various drivers can influence a theme, from structural trends, such as demographic shifts, to public policies and regulations. However, as for most investments they also deeply depend on cyclical drivers such as the outlook for economic and earnings growth, valuation and interest rates changes. Below we outline what we see as key drivers and our related views with respect to our open thematic investment ideas.

Theme	Cyclical Factors				Structural Factors		
	Economic growth	Increase in bond yields	Valuations	Earnings Revisions	Policy support	Trends evolution	Socio-economics
Climate investing	=	×	=	✓	✓	✓	✓
Disruptive innovation	=	×	×	✓	✓	=	✓
Yield-free risk	×	✓	=	n/a	✓	=	✓

Source: Standard Chartered, ✓ indicates the driver supports the performance of a theme. × indicates the driver is currently a headwind to the performance of a theme. = indicates a neutral view

Themes monitor	YTD returns
In a world of yield-free risk	
Private Credit (via BDCs)	27.2%
NCREIF Property Index	5.4%
Global REITS	15.1%
Global Listed Private Equity	24.7%
Global High Yield Equities	8.8%
Contingent Convertibles	2.4%
DM High Yield	1.5%
Leveraged Loans	4.5%
Treasury Inflation-Protected Securities (TIPS)	4.5%
Liquid Alts - Equity Hedge	9.2%
Liquid Alts - Macro/CTA	-0.1%
Liquid Alts - Equity Market Neutral	1.5%
Liquid Alts - Absolute Return	1.9%
Liquid Alts - Event Driven	2.5%
Liquid Alts - Relative Value Arb	3.1%
Liquid Alts - Fixed Income Credit	1.4%
Goldman Sachs Hedge Fund VIP Index	8.5%
Sustainability - Time for climate investing	
Circular Economy – ECPI Circular Economy Leaders Index	21.4%
Alternative Energy – S&P Global Clean Energy Index	-23.7%
Electric Vehicles – Solactive Autonomous Driving Index	14.7%
Water – ISE Clean Edge Water Index	19.6%
Disruptive innovation	
Telemedicine/MedTech – STOXX Global Breakthrough Healthcare	-4.0%
Internet of Things (IoT) – Stoxx Global Automation & Robotics Index	8.6%
Internet of Things (IoT) – Indxx 5G & NextG Index	13.2%
e-Gaming – Solactive V-Games & eSports Index	-11.1%
Fintech – Indxx Global Fintech Thematic Index	2.7%

Source: Bloomberg, Standard Chartered; Performance as of 5 October 2021.

Most of our themes delivered positive returns since its respective initiation date

Calls	Open date	Close date	Absolute	Relative
Time for climate investing theme	13-Dec-20	Open	✓	
Clean energy transition	13-Dec-20	Open	✗	
Water-scarcity	13-Dec-20	Open	✓	
Electric Vehicles	13-Dec-20	Open	✓	
Circular economy	13-Dec-20	24-Jun-21	✓	
Disruptive innovation theme	13-Dec-20	Open	✓	
5G/Internet of Things (IoT)	13-Dec-20	Open	✓	
Medical Technology	13-Dec-20	30-Sep-21	✓	
eSports/Online gaming	29-Apr-21	30-Sep-21		✗
Fintech	14-May-21	Open	✓	
In a world of yield-free risk theme	13-Dec-20	Open	✓	
FTSE 250 to outperform FTSE 100	13-Dec-20	24-Jun-21		✓

Source: Standard Chartered Bank; Relative performance measured against Global Equities (MSCI AC World Index)

Performance measured from 13 December 2020 (release date of our Outlook 2021) to 30 September 2021 or when the view was closed

Legend: ✓ – Correct call; ✗ – Missed call; n/a – Not Applicable; 'Open' indicates the call stays open. Past performance is not an indication of future performance. There is no assurance, representation or prediction given as to any results or returns that would actually be achieved in a transaction based on any historical data.

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