

Top Trends and
High Conviction Themes
Q3 2022

Looking Beyond the Clouds



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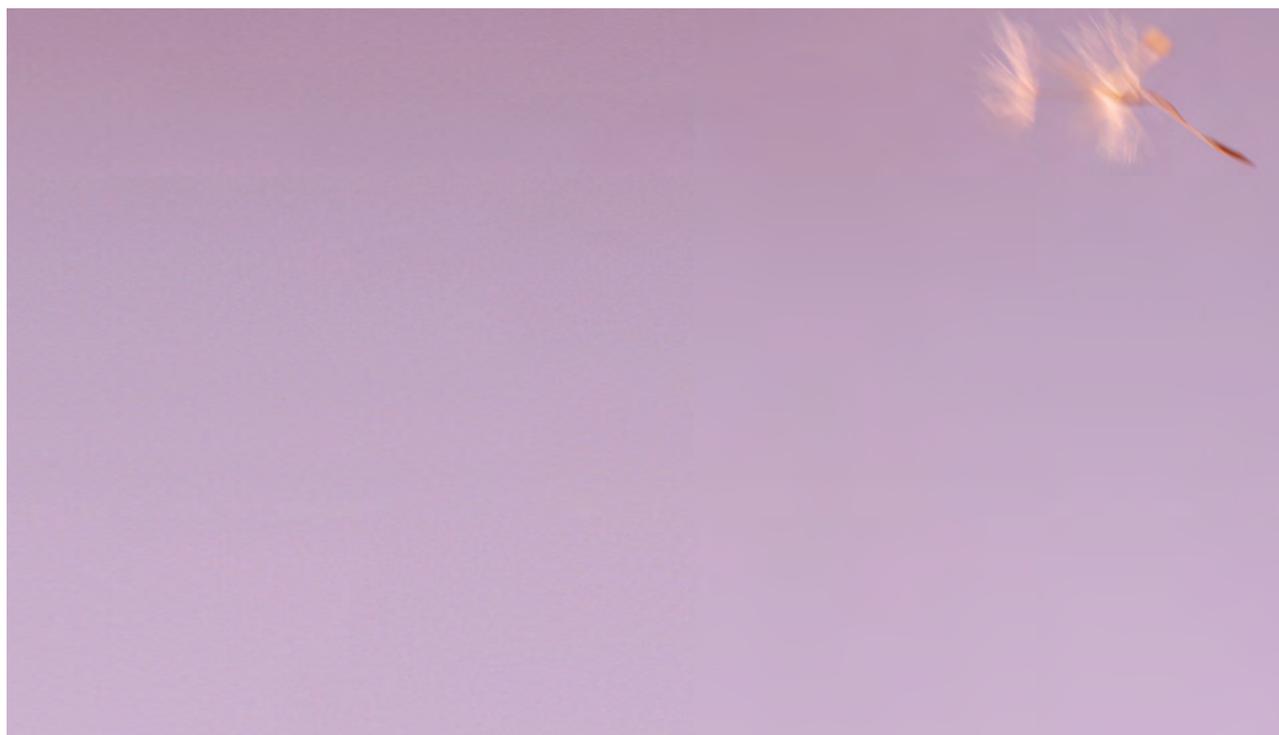
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Welcome

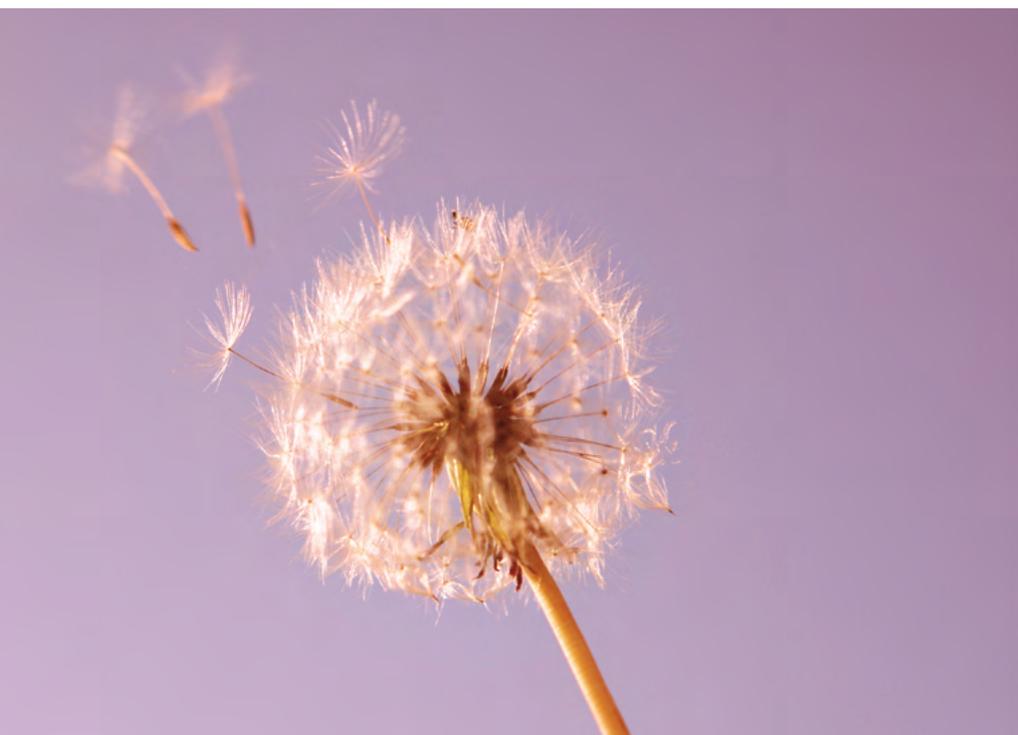


Willem Sels,
Global Chief
Investment Officer
June 2022

Dear client,

For those of you who have grown somewhat tired of reading about inflation, rates and recession risk, we have good news: the publication you are about to read discusses more engaging thematic topics that hopefully 'speak' to you more directly.

The world has gone through some big shocks recently, ranging from COVID-19 to the war in Ukraine, and all of this is happening against the background of dramatic climate change. These shocks are fundamentally changing the world we live in and will have effects that will linger for decades. The COVID-19 crisis exposed the vulnerability of global supply chains, changed working habits and boosted the online economy. The Russia-Ukraine war illustrates the danger of excessively concentrated energy and commodity sources and heightens calls for more energy independence. Taken together, these two shocks will lead to a less globalised and more regionalised world. Finally, the sustainability revolution will require huge investment in the energy transition and will affect what and how people consume. Carbon emissions will start to have a cost, and this will be incorporated in the price of goods and services in the future.



So, it is clear that all business models will be affected by these shocks, and our high conviction themes are designed to help you identify future-proof businesses that will survive and prosper in this new environment.

For example, regionalisation, rising R&D and geopolitical uncertainty support all of our themes under the Digital Transformation trend, including Automation and AI; Biotech, Genomics and Devices; Smart Mobility; The Metaverse and Total Security. Our Asian High Conviction themes focus on the Asia's Green Transformation and Asian Champions at Great Value, and we recognise that rising wages and new consumption patterns support Asia's Consumer Revival. And finally, our Energy Transition and Biodiversity themes are clearly becoming a key focus for investors and businesses, while labour market shifts help drive the Rise of 'S' in ESG.

But while investing in these long-term trends is intuitive, engaging and carries much long-term potential, the short-term performance of these themes is nevertheless subject to financial variables such as interest rates, market risk appetite and short-term volatility. So

when selecting the themes you invest in, we think it's important to use a portfolio approach and consider the market risks that you are taking. For example, many of the themes are tech-related or have a growth stock bias, and as long as interest rates remain volatile, balancing them with value-style themes can be helpful (e.g. Durable Dividends or American Resilience). As we try to balance cyclical and defensive sectors, our wide spread of themes covering consumer staples, healthcare, technology, communications and industrials will give you the choice you need. And geographically, the themes mainly focus on the US and Asia, our two preferred geographies. It is by composing a balanced portfolio of themes that you will limit the exposure to short term volatility, allowing you to remain invested in the themes with long-term potential.

Innovative CEOs are already adapting to the big challenges and opportunities we are facing, and cannot ignore them. Neither can investors.

Our Thematic View of the World

The three structural trends we have identified neatly align with our view that the big global shocks generated by COVID-19, the war in Ukraine and the sustainability revolution will have lasting effects. Together, they are creating a world that is becoming more regionalised, an economy which increasingly moves online and benefits from digital innovation, and a world which yearns for more responsible businesses and races towards the net zero goal.

Long term structural themes can help investors with the structural world view they hold. But we are in a short-term transition too, so our fourth trend is more short term in nature. As central banks have sounded the end to a decade-long policy of generous and very cheap liquidity (in fact, excessively so) engineering a soft economic landing will be no sinecure. We therefore, look for areas with resilience in the stock market, while selecting opportunities in bonds following the rise in yields we've already seen.

Remaking Asia's Future

Our enthusiasm for our Asian themes is certainly helped by the cyclical tailwind in the ASEAN and Hong Kong economies, our belief that support measures by China will start to have a positive effect on growth there in H2, and the cheap valuations of the region's equity and bond markets. But our interest is principally structural in nature.

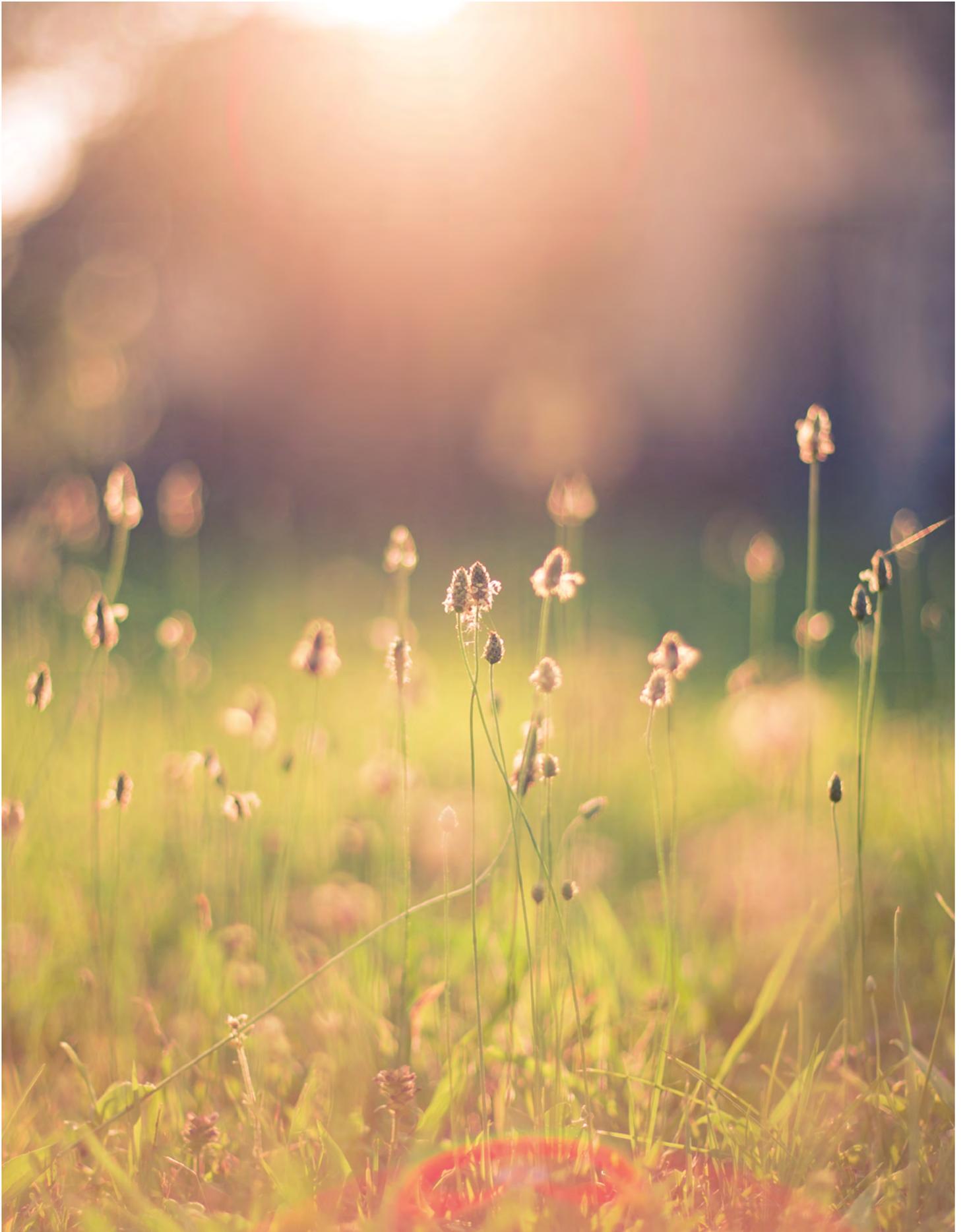
Even before COVID-19 struck, China was prioritising advanced manufacturing, investing in R&D, emphasising technological self-sufficiency and enhancing regional integration to secure

its markets and its supply chains. COVID-19, the war in Ukraine and the required acceleration of sustainability efforts to reach net zero have helped to intensify and further prioritise those pre-existing trends. Asia accounts for 52% of global carbon emissions and it is no surprise therefore that it also accounts for 60% of global renewable energy capacity installations in 2021. Securing energy sources and technological self-sufficiency have become strategic geo-political necessities rather than just desirable economic competitive advantages. Asia already has a strong position in digital and sustainable technologies, which can exploit, and many of the leading companies are trading at great value. Meanwhile, Asia's consumers went through a difficult time during the pandemic, but the middle class continues to rise. And as its consumption patterns change to favour online platforms, local brands and services (away from basic goods). There are plenty of structural opportunities for innovative CEOs in the consumer and services space in Asia.

Digital Transformation

Our world became much more digital during pandemic, and this trend will stick even as economies reopen. Consumers have moved online, the labour market has adopted a much more hybrid model and companies have been forced to change their business models to the digital age. Those that fall behind will quickly see their business models being outdated.

But on the positive side, digitalisation creates a long list of new opportunities. Automation is a long-time favourite of ours,



and it has become even more relevant: supply chain issues are leading companies to bring production closer to home, and automation can help address rising wages and labour shortages. Innovations in AI and leaps in computer power are allowing much more rapid development in health technology, while virtual and augmented reality are cornerstones of the Metaverse. And if there was any doubt about the need to keep our data safe as our lives move online, the Russia-Ukraine war is leading more companies, governments and consumers to protect what's precious to them.

Investing for a Sustainable Future

For us, the sustainability trend is a prime example of a trend rooted in science, supported by governments, companies and all stakeholders around the world, with strong commitments and huge investment for decades to come. Although even sustainable investments are subject to the short-term ups and downs in interest rates and risk appetite, we think this trend has so many angles of support that it is almost inescapable.

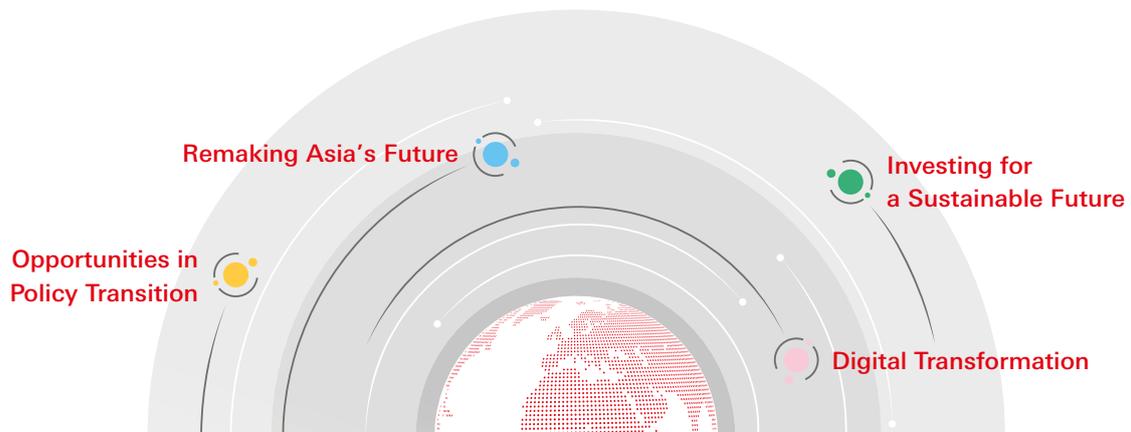
What probably comes to mind first when thinking about sustainability is the energy transition, and indeed we see many investment opportunities related to the technological innovations in solar and wind energy, and earlier-stage technologies such as hydrogen. But the well-known 'planetary boundaries' framework tells us that other areas, such

as biodiversity, should be important priorities as well. Investors who want to make a difference there, or in the more socially-oriented aspects of ESG, will find opportunities to make a change while still achieving attractive medium-to-long term returns, in our view.

Opportunities in Policy Transition

We keep this trend for last, because unlike the others, it is not structural but more short term in nature. As central banks are trying to bring down inflation from the highest level in decades, hike interest rates and remove some of the massive global liquidity that has helped market performance in the past 15 years, it is clear that investors are worried about the execution risk and the possibility of a hard landing of the global economy. We think there is a huge dispersion between weak and more resilient geographies, sectors and companies, and under this trend, we thus look for those areas with the best fundamental support. The US economy should see relative resilience, and we also like companies with durable dividends because they tend to be of higher quality and see lower volatility than average. In fixed income, we are starting to see opportunities following the sharp rise in yields, but of also stick to good quality there.

Our Top Trends and High Conviction Themes



Remaking Asia's Future

- Asian Champions at Great Value
- Asia's Consumer Revival
- Asia's Green Transformation
- Asian Quality Credit

Opportunities in Policy Transition

- American Resilience
- DM Financials – Focus on Subordination
- Durable Dividends
- Resilient Carry in High Yield and EM

Digital Transformation

- Automation and AI
- Biotech, Genomics and Devices
- Smart Mobility
- The Metaverse
- Total Security

Investing for a Sustainable Future

- Energy Transition
- Financing Biodiversity Action
- Sourcing Income in a Sustainable Way
- The Rise of "S" in ESG

Source: HSBC Global Private Banking, as at June 2022.





Remaking Asia's Future

New catalysts from disruptive changes are accelerating the pre-existing structural trends of green transformation, manufacturing upgrading, digital transformation and automation in Asia.

Our four high conviction themes

1. Asian Champions at Great Value
2. Asia's Consumer Revival
3. Asia's Green Transformation
4. Asian Quality Credit

Although the energy and commodity shocks and Omicron related lockdowns in China have caused unprecedented global supply disruptions and economic uncertainty, Asia has demonstrated remarkable resilience and adaptability in the face of extraordinary challenges. The latest disruptive changes have provided new catalysts to accelerate the pre-existing structural trends of green transformation, manufacturing upgrading, digital transformation and automation in Asia. Governments across the region have attached greater strategic focus on energy security, supply chain stability and technology self-sufficiency in response to the disruptive challenges. Our Asian High Conviction Themes focus on opportunities from the region's adaptations to the economic, geopolitical and pandemic challenges.

Asia is well positioned to adapt and lead global adaptation and mitigation efforts to fight climate change, as the five largest Asian economies (China, Japan, India, South Korea and Indonesia) have all committed to achieving carbon neutrality by 2050-2070. Being the world's largest energy consumer and number one carbon emitting region that accounts for 52% of global emissions, Asia currently has the largest share, or 45%, of the world's installed renewable capacity, compared with 25% in Europe and 16% in North America. In 2021, Asia contributed 60% of new global renewable capacity installation and the International Energy Agency forecast Asia will account for 64% of new renewable capacity additions globally between 2019 and 2040.

Our new High Conviction Theme on **Asia's Green Transformation** focuses on opportunities in renewable energy, including equipment makers of solar, wind and green hydrogen, energy storage providers, smart grid manufacturers and leaders in the new energy vehicles (NEV) supply chains. Being the world's largest NEV market, China's NEV supply chains command superior competitive advantage and earnings power against the global peers due to their vast economies of scale, efficient capital expenditure and high labour productivity. China's electric vehicles sales currently account for over 50% of global sales. After recording a hefty 155% growth in 2021, China's national NEV sales are expected to surge 52% in 2022 and 29% in 2023, lifting NEV penetration rate to 40% in 2025 and 75% in 2030.

Looking ahead into H2 2022, we expect a more favourable economic reopening

outlook for most Asian countries given the encouraging vaccination progress. Eight major Asian economies have at least 80% of their populations fully vaccinated. In Singapore and South Korea, over 70% of their populations have received their third booster shots. Led by Singapore, Southeast Asian countries are pressing ahead with reopening borders under the strategy of 'Living with COVID-19'. Singapore has fully reopened its borders to all vaccinated visitors without quarantine requirement. Effective from 1 May, Thailand reopened its borders to fully vaccinated travellers from all over the world. We have turned more positive on the Hong Kong market after the government accelerated the reopening process and relaxed of social distancing restrictions in May.

In China, the government has introduced various policy stimuli to support the job market and the companies which

have been hit by COVID-19 lockdowns. In order to revive depressed consumer sentiment from the pandemic lows, the Chinese government is expected to introduce more direct subsidies for households, such as consumption vouchers issued in Shenzhen and Beijing. In the medium term, China's pursuit of common prosperity should lead to further urbanisation, rising income levels and the expansion of the middle class consumers. Under our theme on **Asia's Consumer Revival**, we see attractive opportunities in the domestic leaders in the travel, hospitality, consumption, healthcare and e-commerce sectors. Consumer service industries in Asia should see improvement in profitability this year, especially in the ASEAN region.

Riding on the structural trends of digital transformation and automation, supply chains revamp, technology upgrading and rising middle class consumers, Asia has become the home of many



industry leaders with global leadership position. Among the Fortune Global 500 in 2021, 231 or 46% of them have their headquarters in Asia. Companies from mainland China and Hong Kong accounted for 135 or 27% of the Fortune Global 500 list last year, making China number one on the list for a second consecutive year. After sharp correction of the Asian equity markets over the past 12 months, many Asian champions with strong brand franchise and resilient earnings power are trading at compelling valuations versus their global peers.

The deep valuation discounts in the quality Asian industry leaders present great entry opportunities for investors who seek to build strategic exposure to Asia's structural growth winners. Under our new High Conviction Theme on **Asian Champions at Great Value**, we identify undervalued Asian champions with outstanding competitive position, robust business model and strong earnings outlook. In our view, the expected stabilisation of US bond yields, peaking of inflation and Fed rate hike expectations and China's growth stabilisation in H2 2022 should support the re-rating of the Asian equity markets on the back of improving ROE. In our view, Asian champions with superior fundamental quality and strong margin power are best positioned to win market share in a challenging environment and recover stronger when economic conditions improve.

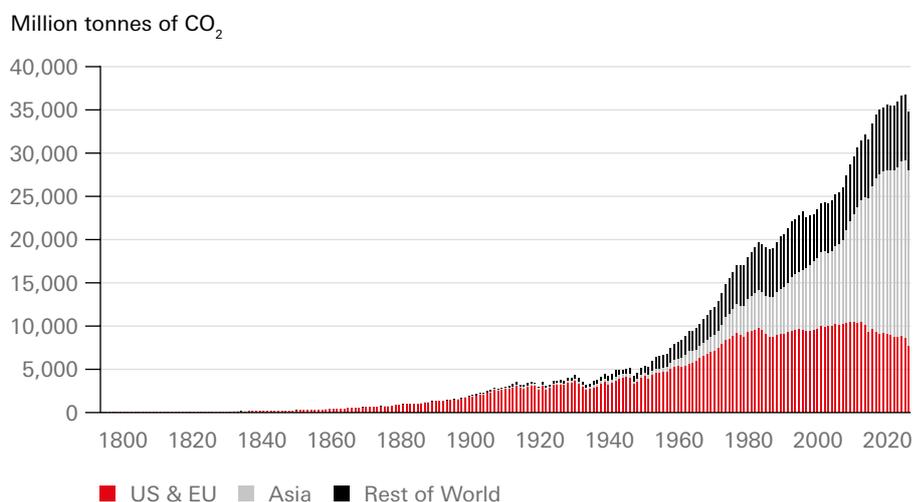
Amid volatility in the bond market, our theme on **Asian Quality Credit** offers attractive carry opportunities. As suggested by the theme's name, we have a strong preference for Asian IG and RMB bonds over Asian high yield for their quality appeal and are enticed by the yield pick-up versus DM and other EM IG credit. We see the best opportunities in Indonesian hard currency bonds, Chinese SOEs, Chinese financials, including the better quality local government financing vehicles. To manage rate and FX volatility risks,

we stay focused on short dated Asian hard currency corporate bonds which are expected to see lower price volatility relative to longer-dated bonds.

To counter mounting growth headwinds, the PBoC cut the 5-year Loan Prime Rate by 15bps to 4.45%. We expect China's rollout of more decisive monetary and fiscal stimulus to drive a stabilisation of economic growth in H2 2022, which will support the recovery of the Chinese credit market. Within the Asian credit

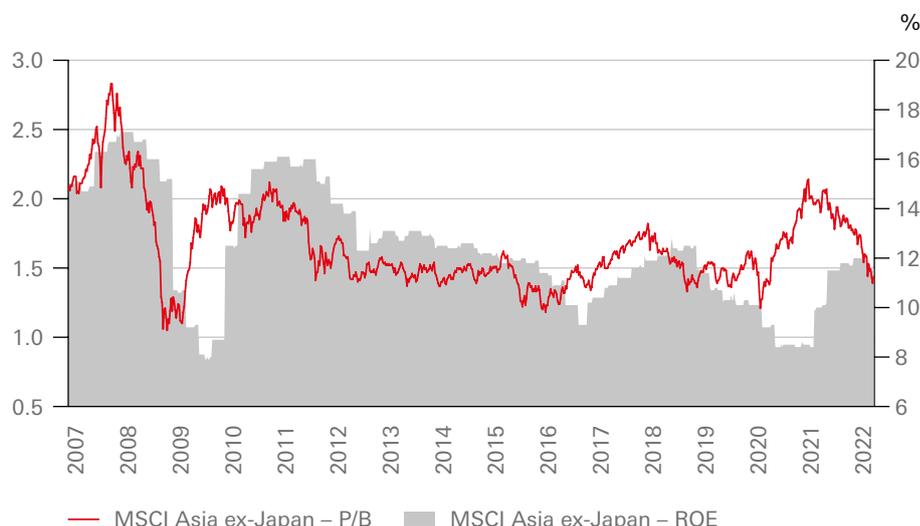
market, we are overweight in Indonesian hard currency sovereign and corporate bonds to reflect their strong credit fundamentals in the face of the easing pandemic headwinds and accelerating reopening. Indonesian credit also benefits from the strong rally of coal and nickel prices.

Asia is the world's largest carbon emitting region and number one investor in energy transition



Source: Bloomberg, HSBC Global Private Banking as at 22 May 2022.

Asian companies adapted to a disrupted world with ROE improvement since mid-2020



Source: Bloomberg, HSBC Global Private Banking as at 22 May 2022. Past performance is not a reliable indicator of future performance.

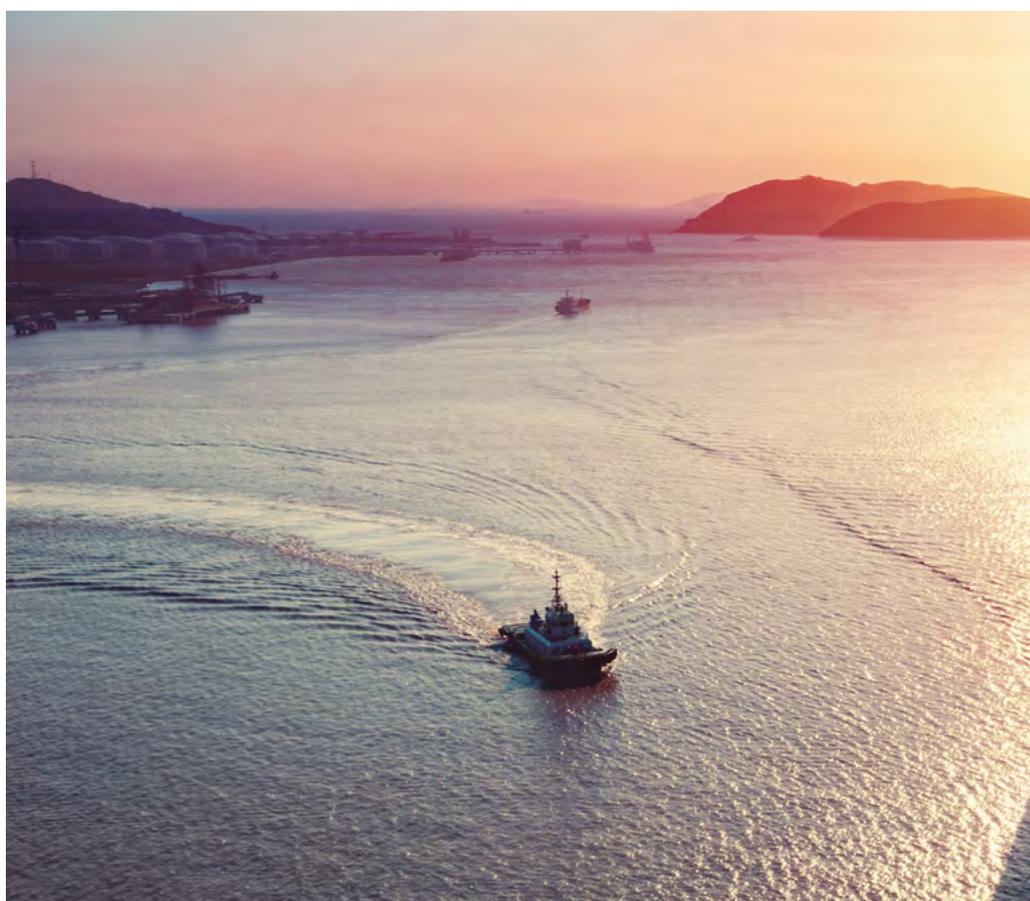
Asian Champions at Great Value >>>**Overview**

- Riding on the development of the supply chains, advancement in technology and rising income, Asia has become the home to many global companies. Among Fortune Global 500 in 2021, 231 of them have their headquarters in Asia.
- Many Asian equity benchmarks have fallen significantly in the past year or so. Some segments, such as tech companies, have dropped much more than the broad markets.
- Some of the Asian champions are trading at attractive valuations, which should represent great opportunities for investors.

The Opportunity

- Asia ex-Japan markets' forward P/E has dropped by one third and Japan's has nearly halved in the past 15 months. Headwinds include higher

energy costs, the Fed tightening, global growth concerns and China's regulatory and growth uncertainties. The bond markets have already priced in much of the front loaded Fed tightening. This means, we believe, the growth slowdown and tightening of financial conditions should limit the scope for hawkish surprises from Fed. Many Asian economies are already or are expected to reopen their economies from the social restrictions. China has pledged to add support and stimulus during and after the current wave of Omicron outbreaks. If economic growth in Asia is to accelerate, the risk premium for the Asian markets should contract and earnings growth should have room to be revised upwards. Hence investing into the Asian champions with attractive valuation should offer outsized upside relative to the broad market.



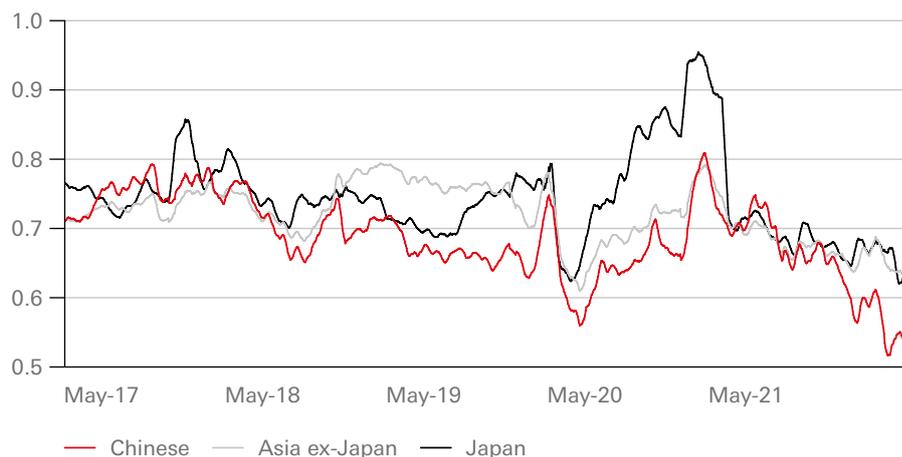
- On top of picking the undervalued Asian champions based on bottom-up analysis, screening companies by their key financial ratios (such as ROE, P/E, dividend and gearing) should also help identify the opportunities.

Why now?

- Asia ex-Japan stock market has underperformed US equities significantly. Forward P/E of Asian markets trades at a one-third discount to that of the US equities. The discount is 1.4 standard deviation bigger than its five year history.
- The Asia ex-Japan stock market forward P/E trades at 1.2 standard deviation below its own five year historical average. Among the regional markets, China, Hong Kong and Taiwan are around one or more standard deviation below their five year historical averages.

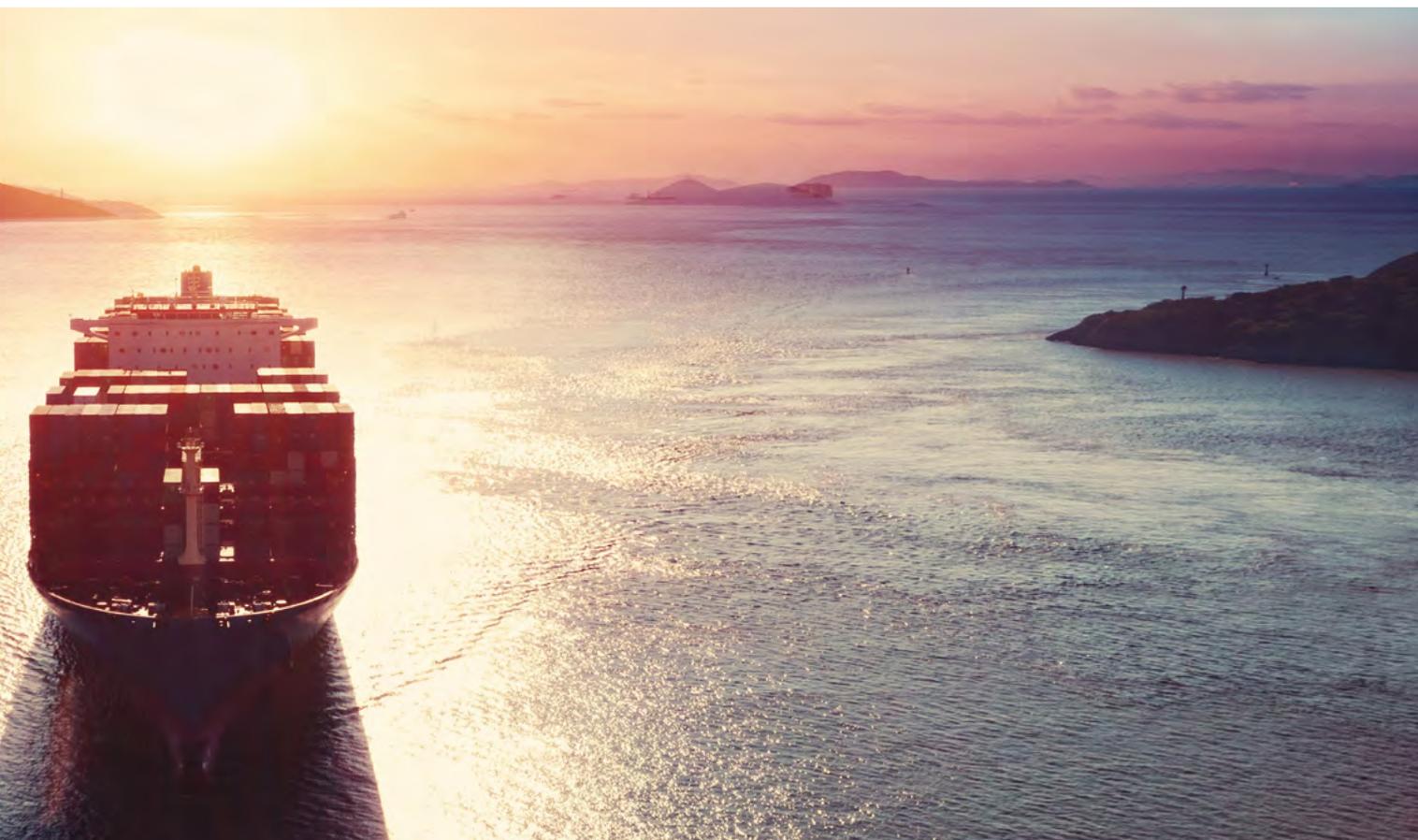
Asian stock markets have de-rated compared to the US markets

Chinese, Japan and Asia ex-Japan equities forward P/E relative to US market



Source: Bloomberg, HSBC Global Private Banking as at 31 May 2022.

Note: Data is two week moving average



Asia's Consumer Revival

Overview

- With rising vaccination rates and new developments in COVID-19 treatment, more Asian countries are moving ahead to reopen their economies.
- Asia should contribute half of global consumption growth in the next decade, given China's pursuit of common prosperity and more high-paying jobs in Southeast Asia.

The Opportunity

- Consumer service industries in Asia should see improvements in profitability. As the Southeast Asian countries press ahead with reopening borders, some North Asian economies, especially Hong Kong, should continue to relax COVID-19 policies after their COVID-19 waves have passed the peaks.
- China's pursuit of common prosperity should lead to further urbanisation, rising income levels and expansion of middle class. In the National People's Congress, policymakers said supply of affordable rental homes was accelerating, supporting consumption in the longer term.
- Asian consumer preference for local brands should provide tailwinds for strong domestic consumer brands. According to NielsenIQ's report, 62% of Fast Moving Consumer Goods (FMCG) sales in the region comes from local brands.
- Digital consumption in Southeast Asia is unlikely to ebb. Companies that can provide convenient services to customers and insights to retailers should fare better but investors should be selective on country and company fundamentals.

Why now?

- Eight major Asian economies have at least 80% of their population fully vaccinated. In Singapore and South Korea, over 70% of the citizens have even had their booster shots.



- Further relaxation of COVID-19 measures are seen in many Asian countries. Malaysia and South Korea removed their outdoor mask mandate in early May.
- China has eventually clarified the 'dynamic zero' approach in view of

the Omicron outbreaks in the country. Manufacturers around Shanghai area have resumed operations in phrases. The central government has introduced various policies to support the job market and companies that have been affected by COVID-19 outbreaks and lockdowns.

New opportunities in the coming decades



One of every two upper-middle-income and above households will be in Asia, according to McKinsey.



McKinsey expects 50% of global consumption growth to come from Asia between 2020-2030.



China plans to build 2.4m affordable housing in 2022, more than double the level in 2021.

Source: McKinsey, NBS, Central Committee of the Communist Party of China, State Council, HSBC Global Private Banking as at 31 May 2022.



The Opportunity

- We expect China's annual solar installed capacity to increase at a 16.1% annualised rate, to 100GW in 2025. For wind energy, we expect annual installations to rise from 48GW in 2021 to 65GW in 2025.
- In India, power demand rose 7.9% y-o-y in FY2022 and capacity addition was strong at 17.4GW, 15.5GW of which was in renewables. Solar accounted for 90% of renewable addition. We expect India's annual solar installations to grow at a 13.7% CAGR to 18GW by 2025.
- In China, after the 155% growth in 2021, we expect its new energy vehicle (NEV) sales to rise 52% and 29% in 2022 and 2023, respectively, so that NEV penetration should reach 40% and 75% in 2025 and 2030, respectively. The supply chain disruption should only be short-term.

- With increasing renewable energy mix and its intermittent nature, Asia needs to invest in energy storage capacity and smart grids. Clean hydrogen will become more common given its advantage in storage, resilience and transport of energy.

Why now?

- President Xi called for 'all-out' infrastructure push, signaling faster construction in infrastructure including green related projects. A Politburo meeting also highlighted that government would help stabilise economic growth through investments in infrastructure, especially in carbon zero related projects.
- Singapore aims to raise carbon tax, with a view to gradually reaching SGD50-80/tCo2e by 2030. To encourage the adoption of energy efficient technologies, the Energy Efficiency Fund will grant 50% to 70% of qualifying costs to the manufacturing sector.

Asia's Green Transformation

Overview

- Asia needs to act on climate change. By 2050, Asia will risk costing USD2.8-4.7trn in GDP due to losses of outdoor working hours as temperature and humidity rise, according to McKinsey.
- Asian Development Bank estimates that ASEAN countries will need USD210bn a year for climate resilient infrastructure till 2030. The IEA estimates that China will need to invest more than RMB200trn till 2060 to achieve carbon neutrality.
- Major Asian economies, including China, Japan, India, and Indonesia, have pledged to achieve net zero by 2050-70.

New opportunities in the coming decades



The IEA estimates China will need **>RMB200trn** to meet its climate goals.



Asian Development Bank estimates ASEAN countries need by **USD210bn** a year by 2030 for climate resilient infrastructure.



We expect China's annual solar installed capacity to increase at a **16.1% CAGR** to 100GW in 2025.

Source: The International Energy Agency and Asian Development Bank, HSBC Global Private Banking as at 31 May 2022.

Asian Quality Credit

Overview

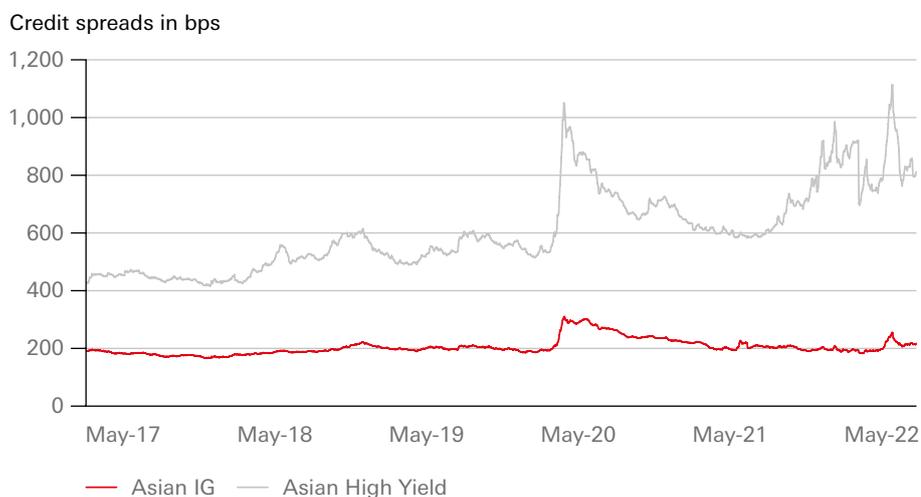
- Asian IG has so far remained a strong outperformer, with the year-to-date total return of -7.6%, far better than the -12.0% of Asian high yield and the -14.0% for global IG (as at May 2022). Pockets of strengths were seen in banks, financial institutions (including local government financing vehicles in China) and shorter dated IG bonds.
- We have a strong preference for Asian IG and RMB bonds (over Asian high yield) for their quality and yield pick-up versus DM and other EM IG.
- We stay focused on short duration bonds which may see lower price volatility relative to longer-dated ones.

The Opportunity

- A positive note for Asian bonds is that China has pledged support and stimulus policies during and after the lockdowns, leading to hopes for better economic growth in H2 2022. The tax cuts and rebates for SMEs are also above our expectations, supporting their cash flows and credit worthiness.
- We prefer focusing on quality, such as Asian IG bonds, which account for 80% of the overall Asian credit market.
- We also seek carry opportunities in Indonesian hard currency bonds, Chinese SOEs and Financials.
- Among the sectors, oil and gas issuers may get tailwinds from elevated energy prices.



Asian IG credit spreads are attractive



Source: Bloomberg, HSBC Global Private Banking as at 31 May 2022.



Why now?

- China property issuers could see sustained stress but we don't expect significant contagion risk to the IG, government and quasi government issuers. China's developers have seen weak contracted sales. Despite some policy support such as the lower down-payment ratios for first home purchases and some relaxation in Home Purchase Restriction, confidence of potential home buyers has stayed relatively weak. We maintain our cautious view on the sector. We expect to see more negative news headlines regarding debt extension of distressed developers or bond restructuring ahead of repayment in H2 2022.
- We focus on Indonesia, whose credit fundamentals remain strong in the face of the easing pandemic headwinds and most SOEs with USD bonds will continue to receive support from the government. The HY sector is also reinforced by the positive demand-supply dynamics.



Digital Transformation

Digitisation is not simply about things ‘talking the digital language’, but an enabler of connectivity, interactivity, transferability, integration.

Our five high conviction themes

1. Automation and AI
2. Biotech, Genomics and Devices
3. Smart Mobility
4. The Metaverse
5. Total Security

Transformation as the word suggests involves significant change and that change is often slow and may well be complex in nature. And so it has been with the world’s transformation from analogue and mechanic formats and systems to digital where the scale of the task is vast, impacting virtually every aspect of our lives. This transformation has gained pace since the start of the millennium as digital infrastructure and products approached a critical mass enabling ever greater levels of interaction both between people and devices. Globally, it is estimated there are 5.9 billion smartphone users (Source: Statistica 2022).

Consider the ubiquitous television, introduced as an analogue receiver of content broadcast of the airwaves it changed little over the proceeding decades. Then a wave of innovation

was enabled as products and services digitalised with distribution via satellite, fibre optic cable and more recently streaming. Content has been significantly expanded and enhanced with an explosion of special effects and interactive services. While the number of televisions has remained static the way media content is consumed has changed as the boundaries between different devices have disappeared due to digitisation. Television, desktop or laptop computer, tablet and mobile telephone – people are using all these devices seamlessly whether that’s watching a film, listening to music, video calling a friend, ordering a pizza or checking in for a flight, they can all be done on all these devices. That is the beauty of digitisation ‘things talk the same digital language’, but there needs to be that critical mass of products and services ‘talking the digital language’ before momentum

builds and that has been increasingly the case since the turn of the century.

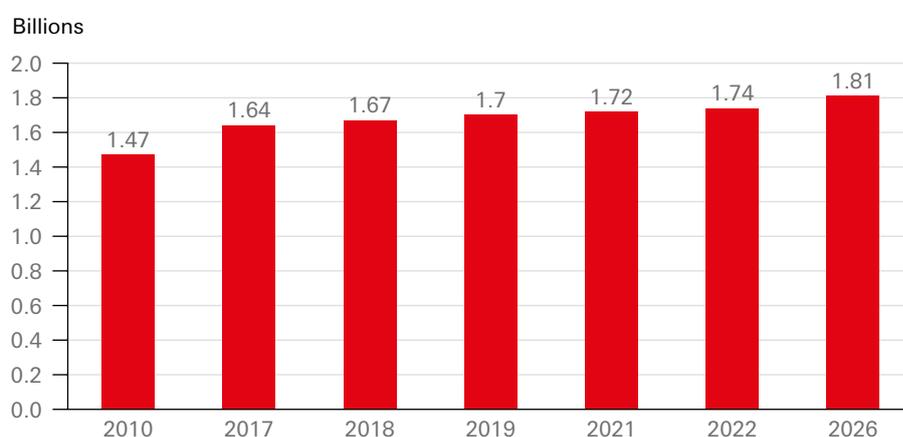
The introduction of numerous digital technologies accelerated this process by disrupting many established business and consumer ecosystems often with predictable consequences and occasionally with surprising consequences.

Let's start by taking a look at automation that has already gone through several iterations over the last two centuries from spinning machines to steam-powered locomotives to mass production lines. Today, many automated processes are hybrid electromechanical arrangements such as manufacturing production lines found in the automobile, food and packaging industries. During the pandemic automation demand plateaued, but it again picked up strongly last year as rising wages and labour shortages drove automation. According to World Robotics 2021 report, it estimated the 435,000 industrial robots were installed globally, a 13% increase on 2020 with demand forecast to grow by a further 6% per annum to the middle of the decade.

Industrial companies may have led in the adoption of automation and recently, there has been a strong growth in service automation. Other businesses and governments are increasingly looking for ways to automate processes and services to benefit from potential cost savings and increased productivity, but also to provide greater business resilience by minimising service interruption risks caused by factors including labour shortages and sickness. For many years now, consumers have performed tasks previously done by company or government staff with physical and web-based self-service options. In addition, AI is allowing automated machines to become more autonomous and with that able to perform evermore complex tasks. Practical examples include screening of insurance and credit applications to voice recognition used to identify people or requests.



Number of TV households worldwide has from 2010 to 2026



Source: Statista 2022.

Automation and AI are both increasing being integrated into science. Biotechnology is using genetic engineering to develop gene-based therapies to treat diseases. Gene therapy are generally considered to be more targeted and have fewer side effects than traditional chemical based medicines. Gene editing tools such as CRISPR (clustered regularly interspaced short palindromic repeats) are enabling scientists to design bespoke therapies for a wide range of diseases. Gene therapies take many forms from the replacement of missing or faulty gene sequences in a person's DNA to those that trigger the person's immune system to target a particular virus that is evading detection. A wide range of conditions are under study including cystic fibrosis, diabetes, haemophilia, HIV and several rare

diseases. Automated high-throughput screening machines handling hundreds of thousands of samples have been essential to the process as they enable the rapid identification of genetic markers, potential targets and therapies. To provide some context as to the size and complexity of the screening task, typically human DNA has over 20,000 genes each containing between a few hundred to over one million bases.

Genome sequencing costs decline graph form the Biotechnology theme

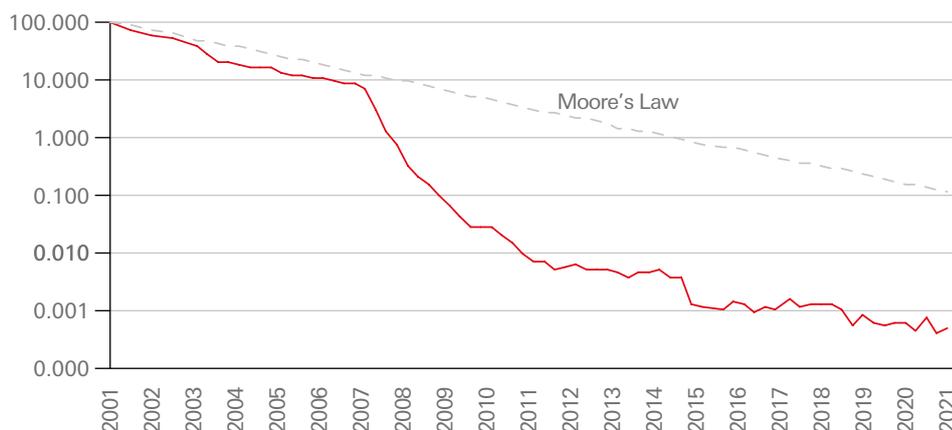
Automation is also assisting surgeons to perform delicate procedures in areas such as the brain, the eye and less accessible areas of the body that were difficult or impossible to perform in the past. Surgical robots have also enabled surgeons to perform operations remotely.

The base enabling technologies described above often have wider applications for example the secure high-capacity connectivity required for remote surgery. Connectivity between people, transport infrastructure and their locality thus facilitating advances in efficiencies, safety and integration of various modes of transport and the urban environments in which they operate. The introduction of electric vehicles should accelerate the introduction of smart mobility capabilities. The adoption of electric vehicles is accelerating helped by government legislation and advances in technology.

An electric vehicle typically has 6x-8x more semi-conductors than its internal combustion engine equivalent. Electric vehicles are based on electrical rather than mechanical systems facilitating greater connectivity and potential integration into urban transport systems. On-board sensors can provide a wealth of information that could be shared enabling improvements in efficiencies and information. Whether that is the precise location of a bus and its arrival time; predicting traffic flows and congestion; early identification of maintenance issues and avoidance of a potential breakdown; all these provide an opportunity to optimise mobility through coordinated private and public transport through improved resource efficiency and better informed travellers.

As is evident from the previous examples, digitisation is not simply about things ‘talking the digital language’, it is about what that enables, including connectivity, interactivity, transferability, integration etc. These characteristics are key to the internet of things where devices and services interact. For example, the EV checks the agenda on the driver’s mobile telephone for the next meeting location; automatically setting the route on the satnav; checks there is sufficient time and charge in the car’s battery; also suggests potential stop off points for lunch (it is one o’clock) and booking a place on a ferry that is needed.

Genome sequencing costs decline



Source: NHGRI Genome Sequencing Program (GSP) as at August 2021.

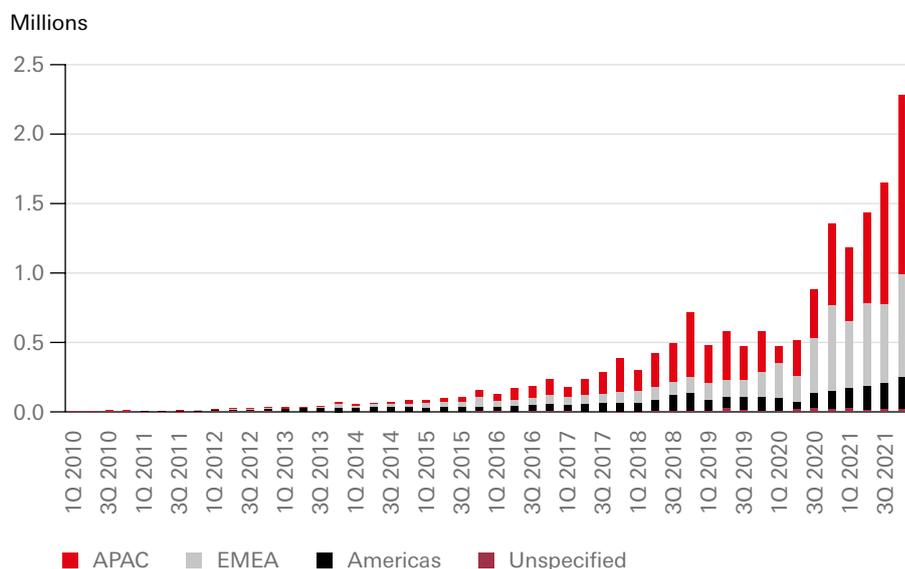
For all this to happen, all devices and services must be digitalised. The benefits are clear and the transformation is well underway but not complete.

Where digitisation is more advanced, new innovative businesses have been introduced, existing businesses have been able improve efficiency and automate, while inevitably, some established businesses have struggled to stay relevant or simply cannot compete effectively as they have not adapted. The retail sector provides a brutal example of the new reality evidence by the many vacant retail units on city high streets and shopping centre as online retailers

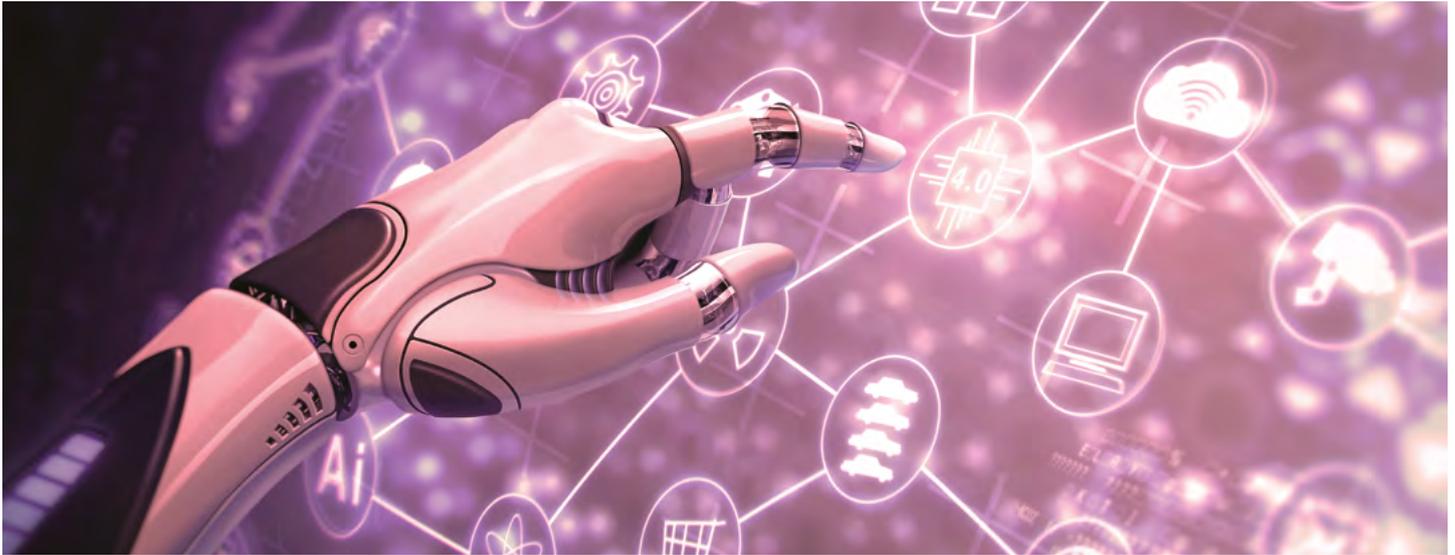
benefit from lower fixed costs, wider potential accessible customer base and more flexible business model.

However, digitisation has brought a wave of innovation in terms of products and services both new and reimagined existing services. Today, it seems unimaginable for people to not have mobile telephones, email and the resources of the internet at your fingertips, but only 30 years ago this was the reality for most people. Digitisation still has huge potential to transform our lives even further if our imaginations and our potential to innovate permit.

Electric Vehicle Unit Sales by Region



Source: Bloomberg Finance L.P., HSBC Global Private Banking as at 31 May 2022.



Automation and AI

Overview

- Automation has been growing for many years but developments have been relatively slow and remained confined to certain industries.
- The combination of rapidly improving technologies, societal comfort in using technology and the pandemic have expanded the demand for robots and automation around the globe, particularly in services and the growing three dimensional virtual world of Metaverse.

The Opportunity

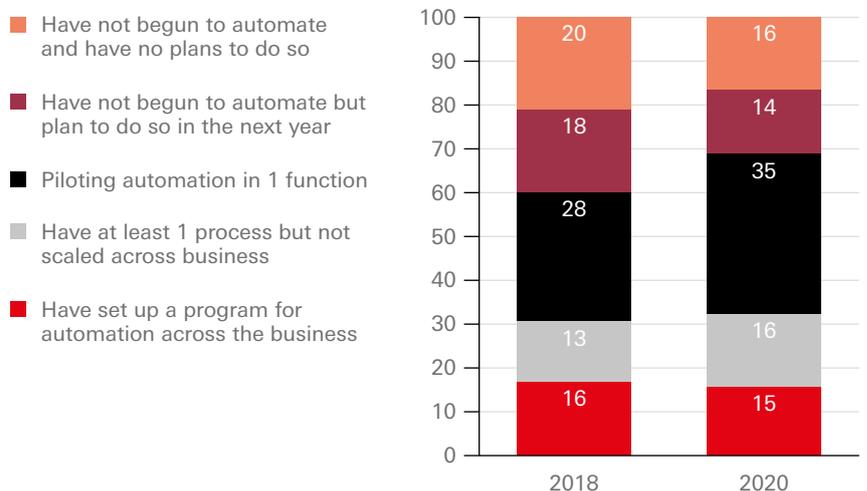
- Robot sales continue to boom with the International Federation of Robotics (IFR) highlighting that since 2015 the robotics industry has grown at 9% annually on average.
- There were 383,545 robot installations in 2020 placing it, despite the pandemic, as the third most successful year for robot installations.
- The majority of the market is in five countries: China, Japan, the US, South Korea and Germany, who together account for c.76% of the global market.

- The industrial economy is reliant on automation to improve profits and productivity. Sales of robotics in 2021 were up 28% over 2020, as a result of post crisis recovery (Source: Sme.org; Association for Advancing Automation, Feb 2022).
- The Metaverse is gaining traction and will rely on AI to allow seamless interaction of participants.
- The development of 5G and the associated hardware, in particular robotics is making huge advances, creating opportunities for industry, services and the Metaverse.
- A refocus on local production for many countries should see an increase in capex spending which should focus on automated technologies to maximise efficiencies.

Why now?

- With the pandemic easing and global economies on a recovery and renewal trajectory, sales of robots are expected to see additional growth.
- Advances in data management and analysis and in artificial intelligence are raising the value that can be extracted from automated processes for companies.

Organisational Actions to Automate Business Functions (%)



Source: Mckinsey & Company, HSBC Global Private Banking as at 31 May 2022.
 Note: The number in bars represent the actual number of responses.

Biotech, Genomics and Devices

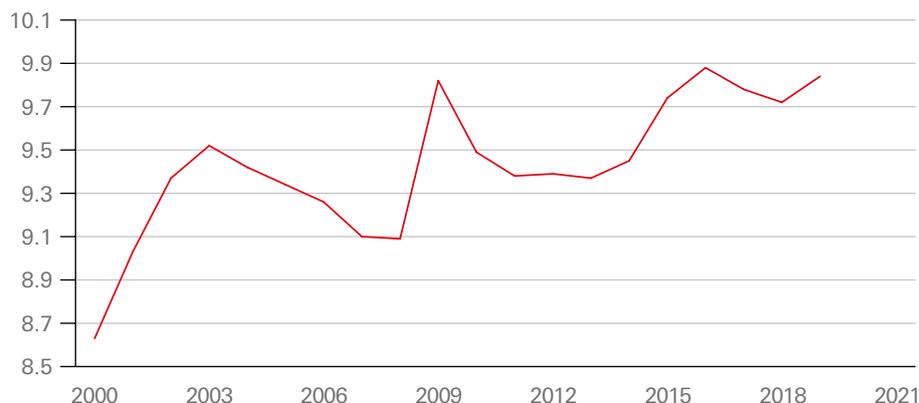
Overview

- Healthcare budgets are growing faster than inflation in most countries as populations age and/or grow.
- Innovative new technologies are enabling healthcare services to be delivered in novel ways, often at lower overall cost with better patient outcomes.
- The pandemic has been a catalyst for the rapid adoption of many cutting-edge and digital technologies.

The Opportunity

- Biotechnology is delivering novel complex, ground-breaking treatment for previously difficult to treat diseases including monoclonal antibodies and gene therapies.
- Genomics is leading to a greater understanding of gene based diseases and their causes.
- Gene sequencing, screening, and editing (CRISPR) technologies are offering breakthrough therapy opportunities.
- AI applications are accelerating and enhancing the diagnosis of diseases.

Global Healthcare Expenditure as % GDP

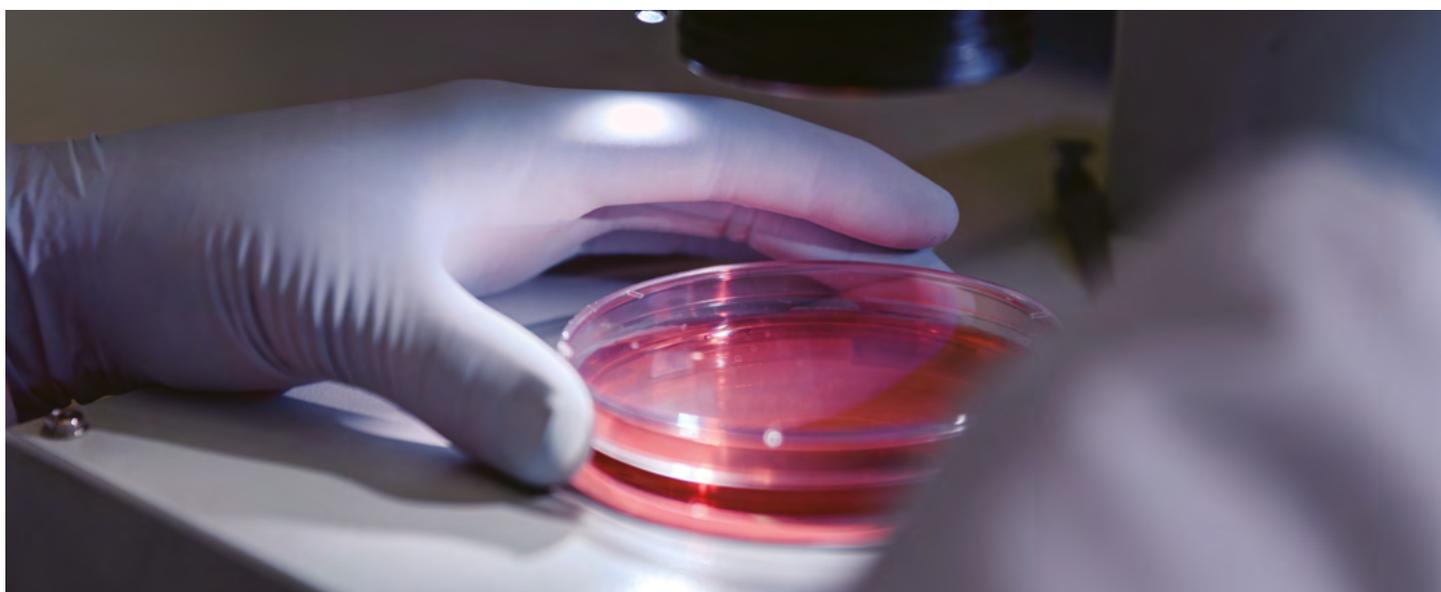


Source: The World Bank, HSBC Global Private Banking as at 31 May 2022.

- Stem cell based therapies are starting to show promise.
- Connected devices and sensors offer continuous patient monitoring and a rich source of data.
- RNA and DNA vaccine technologies offer great potential for preventative medicine in large populations.
- Globally, more and more is being spent on healthcare annually.
- The pandemic has impacted national budgets, so the need for efficiencies is much needed.
- Clearing the backlog of elective healthcare procedures (e.g. hip and knee replacements; corrective surgery; etc. delayed due to the pandemic) is now a priority.
- Global shortages in healthcare resources place an upward support on solutions.

Why now?

- Rapid evolution of several ground breaking technologies such as gene therapies, lasers and automation are now being used in practical applications and treatment regimens.



Smart Mobility

Overview

- Smart mobility includes the integration of intelligent technologies in transportation, but it is also about governments, companies and individuals making smart decisions about their choices of mobility given the environmental and demographic challenges.
- The Paris Agreement, the COP26 and the IPCC climate study give an even greater sense of urgency to the adoption of zero-emission technologies, including in transportation. Electricity, hydrogen, biofuels and ammonia are potential zero-emission or green fuels that should help reduce emissions.

The Opportunity

- Electric vehicle (EV) purchases have accelerated significantly in major economies as consumer adoption gains momentum and new models are introduced.
- EV infrastructure is being added at a rapid pace in several countries to meet growing demand.
- Battery technology continues to advance benefiting from increased R&D budgets and soaring applications.
- The roll-out of 5G networks, in-vehicle and sensor technologies connecting transportation to the surrounding environment and other forms of transport.
- Commercial vehicles and trains could benefit from the advancements in hydrogen fuel cell technology.

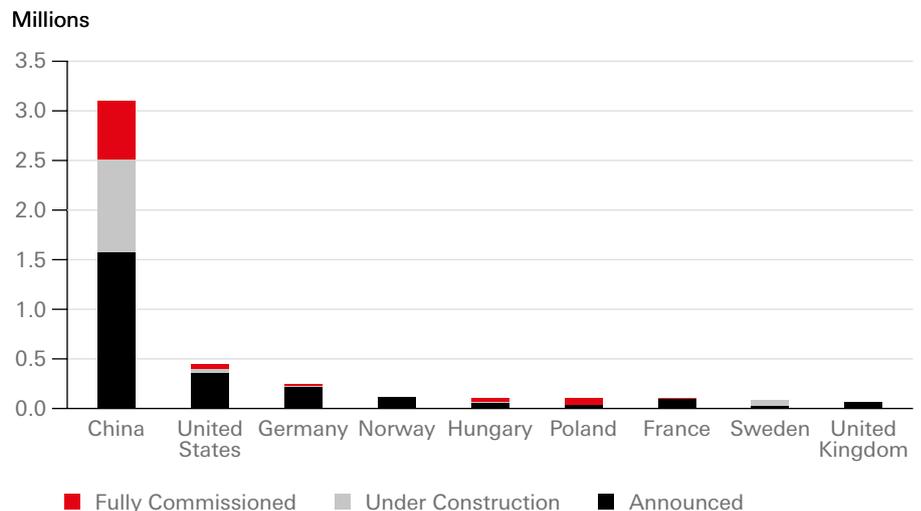
Why now?

- Transportation companies and systems are being forced to phase out the use of fossil fuels over the next decade as countries strive to achieve net zero emissions.



- Technologies have advanced sufficiently to make alternative energy formats (lithium batteries, fuel cells, bio-fuels) to provide a viable economic zero-emission alternative source of power to fossil fuels for transportation.
- Fiscal stimulus packages in several major economies have environmental and infrastructure provisions that should also provide some additional financial impetus.

National Utilised Capacity for Battery Manufacturing (MWh)



Source: Bloomberg, HSBC Global Private Banking as at 31 May 2022.



- The technological advances in VR headsets are getting interest from corporates considering conducting meetings in a VR space, a step on from video calls.
- Entertainment will be altered completely. Entertainers can deliver their art virtually to vast audiences at once. This has begun already when Fortnite hosted a Travis Scott Concert in 2020 to an audience of 12m and pocketing the artist USD20m (Source: NME.com).
- Retail could also be vastly different with NFT technology able to authenticate the originality of a digital outfit, vital for luxury goods in particular and some luxury brands have begun to experiment with digital offerings.
- Travel, socialising, healthcare and finance are all facing disruption from the Metaverse opportunity.

Why now?

- The pandemic has moved the world and corporates to allow more flexible, hybrid working approaches and VR, including VR spaces, look likely to play a key role.
- Recent developments of faster and better data networks via 5G, cloud networks, 3D engines and the supporting data management techniques provide the infrastructure for the Metaverse to be built out.
- Recent announcements by many high profile digital companies to focus their strategy on the Metaverse demonstrates a tech race for this new economic ground and a commitment of capital and expertise to the opportunity.

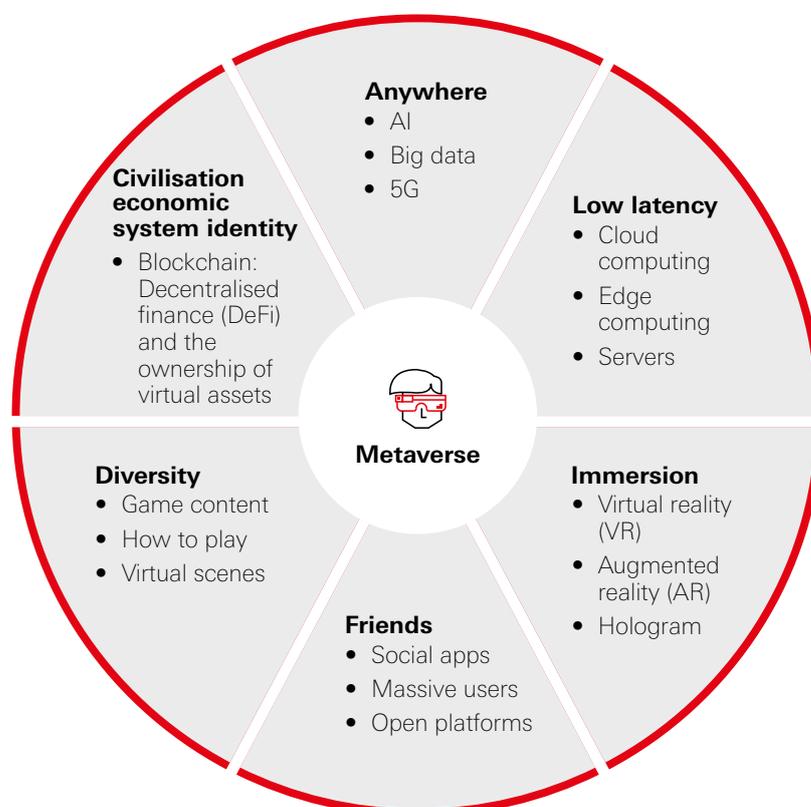
The Metaverse

Overview

- The Metaverse is a 3D digital universe connected to the real world – where people can interact, work, play and socialise – is economically gaining traction, with associated technologies advancing rapidly.
- Wearables, 5G, chips, 3D software engines, optical tech, online interaction comfort, blockchain, VR, AR and smart contracts are combining to bring the Metaverse to the forefront of investor opportunities.

The Opportunity

- In a world where corporates are operating a hybrid work from home model and people are growing up conditioned to socialise digitally, there is a vast opportunity for investors as the Metaverse expands.



Source: HSBC Global Private Banking as at 31 May 2022.

Total Security

Overview

- Recent geopolitical conflicts demonstrate the need for proper national and personal security, including security of supply chain in industries like energy, food, and semiconductors.
- Connected devices advance the need for physical and digital security.
- The global pandemic and recession exacerbated the work from home and e-commerce trends. Increased use of digital education, financial products, healthcare, and commerce are expanding the need for security.

The Opportunity

- Recent geopolitical strife has lifted demand for national, corporate, and personal security.
- Conflicts and inflation have cut supply and increased prices. Food and energy insecurity have risen. Economic growth is increasingly determined by physical and digital security.
- New infrastructure spending must incorporate both physical and digital security. The internet of things, device-to-device communication, and smart devices all require updated infrastructure to operate securely.
- Digital security incorporates hardware, software, and services to prevent and deter physical and digital attacks.
- A more interconnected global economy with cutting-edge digital smart tools increases the need for digital security.



- Governments, corporations, and individuals will drive demand for all forms of security in an effort to protect privacy, transactions, data, and supply chains.

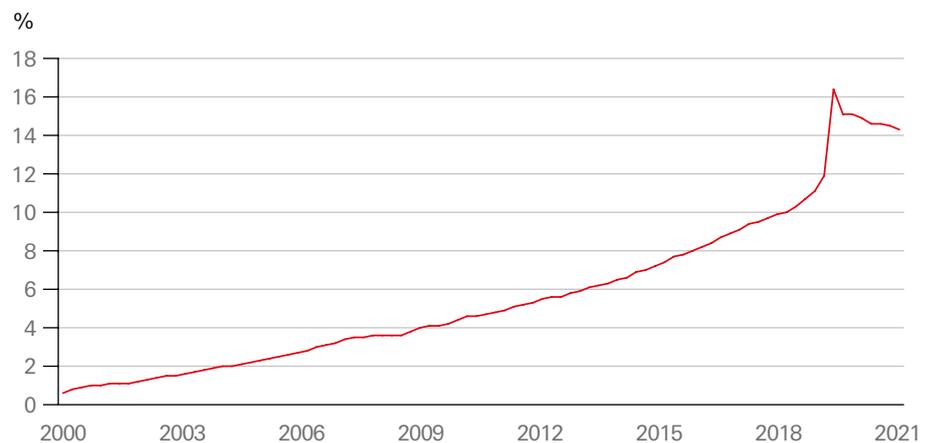
Why now?

- Conflicts and war have affected supply chains and lifted inflation. This has increased overall insecurity, especially in food and energy supplies, raising the need for more security.
- Continued cyber attacks on utilities and government networks have created increased insecurity. Recent attacks have highlighted new vulnerabilities that must be addressed.

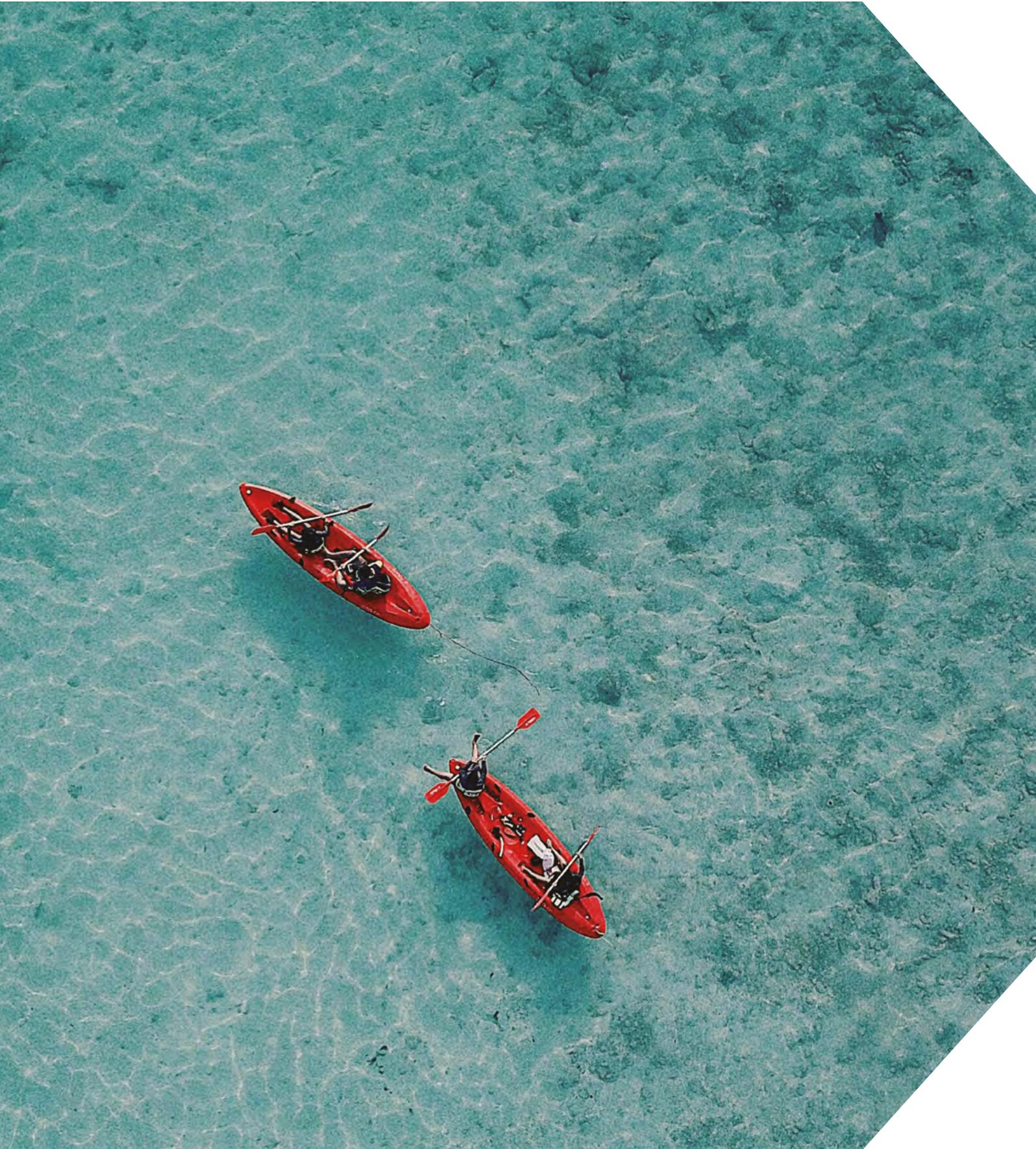


- Government and corporate budgets are therefore focused on physical and digital security and the need to train employees in secure practices.
- There is a drive to modernise infrastructure and to create a more sustainable global economy.
- The services sector has reopened and its increased demand is creating bottlenecks in supply chain networks. Companies are investing in rebuilding inventories and shifting from 'just in time' to 'just in case' models to secure supply chains.

US e-commerce sale/Total US retail sales



Source: Federal Reserve Bank of St. Louis, HSBC Global Private Banking as at 31 May 2022.



Investing for a Sustainable Future

The sustainable transition will happen for three key reasons: Affordability; Urgency and Capability.

Our four high conviction themes

1. Energy Transition
2. Financing Biodiversity Action
3. Sourcing Income in a Sustainable Way
4. The Rise of "S" in ESG

Currently, sustainability offers investors a historically unique opportunity. Never again will there be so much investment opportunity available from saving the planet. If we look far enough into the future, sustainability won't be a question that investors will need to ask themselves about. The economy will have largely shaped itself into a sustainable ecosystem and all investment decisions will have sustainability as a normal part of business, a given, like annual leave or pension liabilities – once themselves considered to be do-gooder notions but rightfully, over time, incorporated into standard business practices.

The sustainable transition will happen for 3 reasons; 1) **Affordability**: consumers can afford to demand change

2) **Urgency**: society and governments cannot afford NOT to demand change and 3) **Capability**: technology and understanding to deliver change is being quickly realised.

Affordability

Humanity is objectively richer than it was 40 years ago. According to The World Bank, global poverty, defined as living on USD1.90 a day, PPP adjusted, has declined from 41% of the global population in 1981 to c.10.1% as of 2015 and it is likely lower still today. While this figure is still higher than the 0% goal, it is still a remarkable amount of progress. One of the additional upsides of this situation is that wealthier consumers make healthier choices. Healthier choices raise demand for sustainable products

and services and we know that this has begun. It is not happening everywhere but it is happening.

Urgency

Secondly, we now understand and accept the damage fossil fuels have wreaked on our planet and we cannot afford to ignore it or procrastinate in its reversal. The below chart, possibly the scariest in our history, tells the story of how modern carbon production has impacted our atmosphere. Taken from ice core samples it measures the amount of CO₂ in our atmosphere over the last 800,000 years.

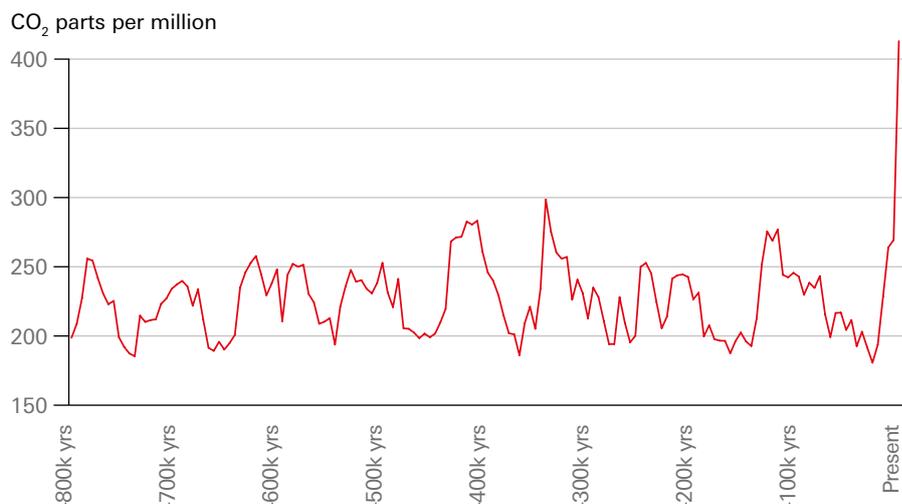
The picture is clear and it is stark. It has resulted in political acceptance of the problem in many regions and the creation of regulations, rules, fines and markets designed to steer the economy toward a sustainable future. There is a new rigour about this effort touching on many areas that have long been highlighted as sustainable such as solar, wind and electric vehicles but newer areas are beginning to be looked at as in need of sustainable approaches and with that comes investment opportunities.

Capability

Finally, we have technology. Sustainable technologies are driving a proliferation of sustainable offerings. The flagbearers for sustainable technologies are solar and wind energy. Per the below, the cost of generating a unit of solar energy has fallen substantially as a result of technological improvements made in an ongoing basis. And wind is similar.

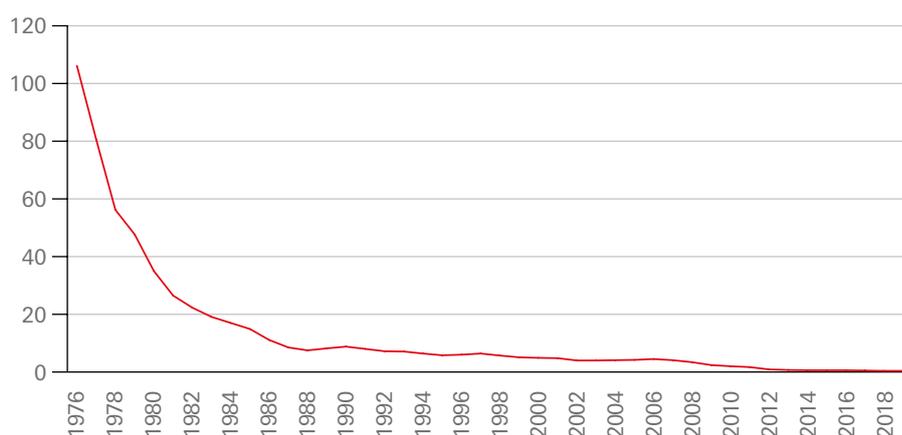
Sustainable methods are now competing on a cost basis with fossil fuels while also bringing their sustainable benefits. But that is not the only story in sustainability, more and more products and services are becoming available every day that meet much higher standards of sustainability than previous options. Cars, buses, bicycles, shirts, shoes, cleaning products, bags, make up, burgers, milk etc. are all undergoing a sustainable rebirth. And sustainable companies are getting rewarded by consumers and investors

800 Thousand Years of Atmospheric CO₂



Source: Revision of the EPICA Dome C CO₂ record from 800 to 600 kyr before present. Geophysical Research Letters as at 14 December 2014.

Solar PV Module Cost (2019 USD per W)



Source: IRENA's 'Renewable Power Generation Costs 2019' report.

with sustainable product announcements often lifting share prices. Increasingly too, companies that demonstrate good performance in Social concerns are being rewarded by the market.

The opportunity outlook

The turmoil of the markets and the risks in the global economy have weighed on sustainable investment sentiment over the last 6 months or so. Prices have declined and investor concerns are growing. The industry has not escaped rising concerns such as inflation, interest rates, supply chain issues, the Ukraine conflict and China real estate. The result is that the space is giving back much of

the gains that were delivered through the pandemic rally. Fossil fuels, as it happens, have been the main beneficiary of the market conditions in recent months, largely for structural reasons.

To invest sensibly though, we need to step back from the market noise, look through the headlines and review what is happening at the business level. That tells a different story and some examples such as European energy goals, global solar demand and renewable diesel figures indicate that the future of sustainable investing is still well supported.

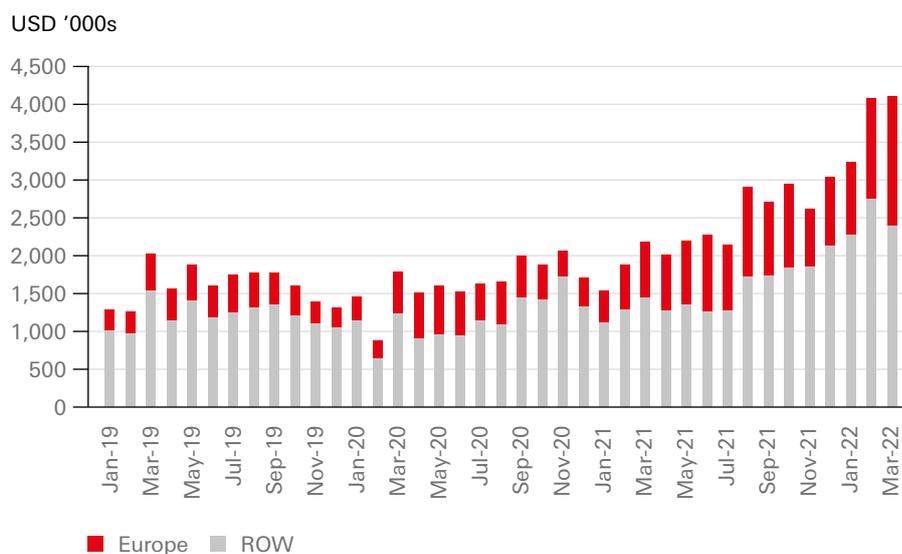
European demand

The recent, large, moves in the oil price have given rise to fears that plans for a sustainable energy future are being curtailed but this is not the case. The Oil price rise has been driven in large part by sanctions placed on Russia. Europe and Germany, in particular, are heavily reliant on Russian energy and have been faced with the dilemma of enacting their moral position of applying sanctions against the practical position of energy shortfalls and escalating energy prices for their citizens. They have surprised many with the pace of reducing their reliance on Russian energy. The share of oil imports by Germany from Russia are down from 35% to 12%, coal from 50% to 8% and gas from 55% to 35%¹. Overall, the European Bloc has highlighted that they aim to become independent of Russian fossil fuels. In the near term this will mean turning to alternative fossil fuel sources but in planning for the future, renewables will be major beneficiaries. There are 3 reasons why sustainable energy would be a preferred path. Firstly, energy production will be within the bloc increasing their energy independence which is a stated goal. Second, it will reduce the carbon footprint of the bloc, also in line with stated net-zero goals. Thirdly, the region looks to be heading toward a more difficult economic environment of higher inflation and slower growth so onshore renewable projects would create jobs in the region, a political and economic positive.

Solar demand

The demand for solar panels is stronger than it's ever been. China, the leading region for solar panel manufacturing, exported more solar cells and modules in March 2022 than any other month on record. The bulk of the exports went to Europe but the distribution of the solar exports was well spread globally (chart below). This data also does not include China's solar spending which is expected to be close to 40% of the global market for solar building in 2022 and it also is

China Solar Exports



Source: Bloomberg New Energy Finance, HSBC Global Private Banking as at 10 May 2022.

impacted by the supply chain difficulties being faced in the industry.

Renewable diesel

Elsewhere, in the US, renewable diesel has surpassed biodiesel for the first time, as measured by the number of biofuel credits generated. This is a significant event for a sustainable future. Both are much improved alternatives to traditional diesel but renewable diesel offers lower emissions, is cleaner, has better cold and storage properties and can be used in high concentrations or even as a standalone product in diesel engines – biofuel needs to be mixed with traditional diesel.

At scale, the reduction in emissions from using renewable diesel over fossil fuel diesel can be significant. Tankers, trucks, rail, farming, manufacturing, metals and mining are all reliant on diesel. Importantly, the refinement process for renewable diesel shares many similarities with traditional diesel so major refiners can adjust production processes relatively quickly and easily. Since 2020, more than 730 million gallons of renewable diesel capacity has been brought online and it is estimated that

renewable diesel can reduce greenhouse gas emissions by 40% to 90%.

While sustainability has come a long way and rewarded believers, near term sentiment is weighing on the sector but we believe sustainable investing is getting richer in opportunities, not poorer, because the transition is occurring across the entire economy, with more acceptance and better technology propelling it along. Recent events such as the COVID-19 pandemic and the Ukraine crisis will ultimately only further support the case for sustainable investment, particularly in energy where most countries have outlined their desire to be carbon neutral and to be less reliant on others for energy. Renewables progress will likely be accelerated as a result, meeting both goals in the process.

All in all, macro and micro tailwinds for investing in a sustainable future are many and whether sustainable concerns are part of your investing approach or not, sustainability is a great investment opportunity; saving the planet just happens to come with it.

¹ <https://www.economist.com/the-economist-explains/2022/05/04/how-heavily-does-germany-rely-on-russian-energy>

Energy Transition

Overview

- Global initiatives continue to target a transition away from polluting energy sources.
- Recent geopolitical conflicts have exacerbated energy supply chain issues. Market prices are pushing alternatives closer to grid parity. Natural gas and nuclear power are now seen as potential sources of clean energy.
- Investment in sustainability focused infrastructure is increasing.
- Technology and data are improving the ability of energy providers to deliver lower carbon energy closer to grid parity.

The Opportunity

- Global tensions and increasing energy demand are causing nations to re-think how to meet the current demand while planning for future cleaner energy needs.
- Global climate change initiatives and net-zero carbon targets are leading public and private entities to invest heavily and reshape the energy model for society.
- The public and private infrastructure spending programs announced in major economies are focused on investing in sustainable models for global energy.
- Recent energy price volatility has raised demand for more local, consistent alternatives that are also greener in nature.
- Technologies for renewable energy generation, carbon capture and sequestration, and energy management are making lower carbon energy sourcing more economically competitive.

- Energy users are realising that renewable and cleaner options can reduce costs.

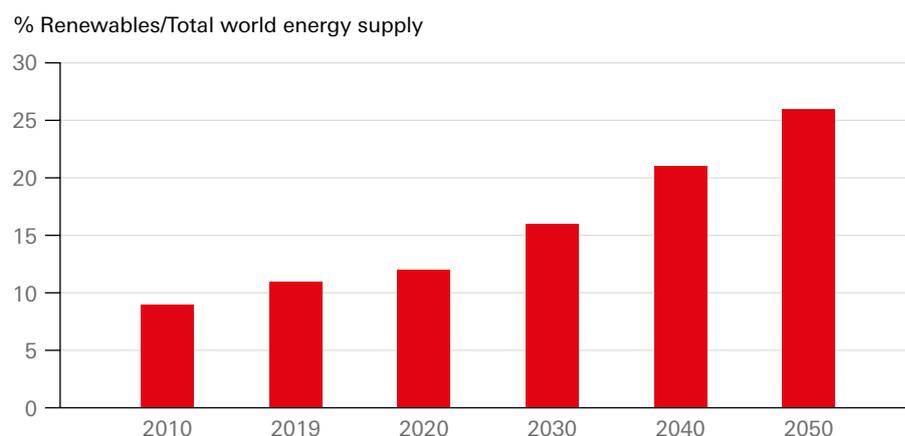
Why now?

- Higher energy prices are making alternative energy projects more feasible.
- The need for energy products in Europe raises global LNG export opportunities.
- The pace of climate change continues to threaten biodiversity and rapidly shifting temperature changes continue to threaten the global ecosystem. Dramatic action seems more imperative than ever.

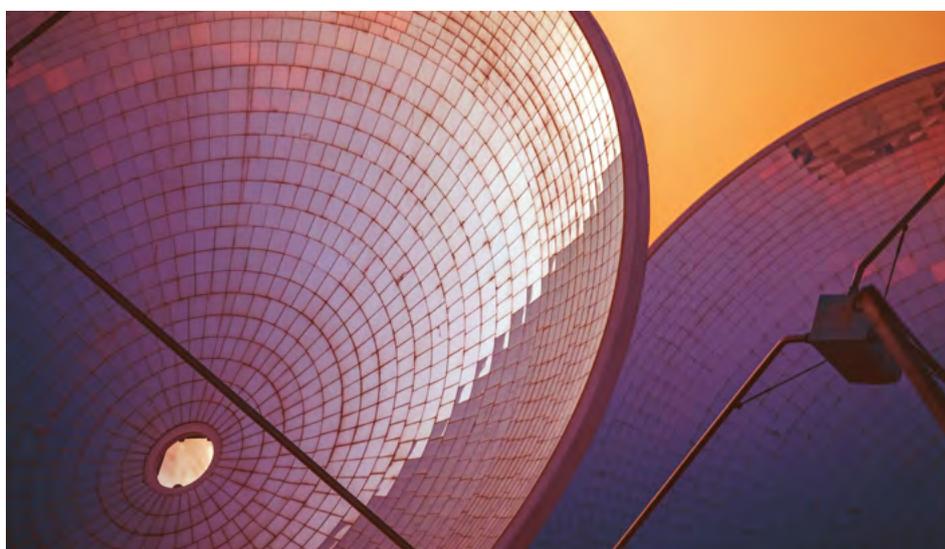
- Governments, corporations, and individuals – all agree that significant steps are needed quickly.

- The US, Europe, and China have all committed heavily to greener energy objectives and these new budgets are just getting funded.
- Many governments are currently facing political pressure on local energy needs due to high energy prices.
- Energy transition provides multiple avenues for the energy industry to become more sustainable.

Renewables are expected to be 25% of global energy supply by 2050



Source: IEA (2021), World Energy Outlook 2021, IEA, Paris, HSBC Global Private Banking as at 31 May 2022.





Financing Biodiversity Action

Overview

- Earth's biodiversity is in sharp decline. Rising pollution, climate change, habitat loss, exploitation and other human activities are reducing biodiversity.
- The population sizes of mammals, birds, fish, amphibians and reptiles have seen an alarming average drop of 68% since 1970.
- 50% of the world's habitable land area is being used for agriculture and is leading to a sharp reduction in biodiversity.
- Only 4% of the world's mammals and 30% of the world's birds are wild.

The Opportunity

- Public opinion is putting more pressure on companies which do not try to preserve resources by facilitating recycling and further development of a circular economy.
- The economic benefits of biodiversity are substantial and across sectors. Innovative technologies and new ingredients like alternative proteins open up new sustainable possibilities to meet the demand of a rising global population.

- Development of sustainable fishing business models and limiting pollution through water sanitation present opportunities. So do alternatives to plastic including the development of sustainable materials such as bio based, biodegradable or long-lasting materials.

- Similarly, application of new farming practices and the introduction of innovative technologies and equipment can reduce negative environmental impacts and boost yield which presents attractive investment opportunities.

Why now?

- With the world's population forecast to reach 10bn by 2050 and food security a key concern, traditional agriculture and fishing methods are threatening many species with extinction.
- Consumers, businesses and public authorities are now becoming increasingly aware of the importance of biodiversity and promoting actions for its restoration or preservation.
- Companies which mitigate environmental damage therefore have a substantial growth opportunity.

The environmental impacts of food production

Agriculture is responsible for 80% of global deforestation



80%
Real
Deforestation

Agriculture accounts for 70% of freshwater use



70%
Freshwater
Use

Drivers linked to food production cause 50% of freshwater biodiversity loss



50%
Freshwater
Biodiversity
Loss

Food systems release 29% of global GHGs



29%
Global
GHGs

Drivers linked to food production cause 70% of terrestrial biodiversity loss



70%
Terrestrial
Biodiversity
Loss

52% of agricultural production land is degraded



52%
Degraded
agricultural
land

Source: WWF Living Planet Report 2020, CBD, GSDR, ELD initiative, HSBC Global Private Banking as at 31 May 2022.

Sourcing Income in a Sustainable Way

Overview

- The global economy is slowing, monetary policy accommodation is being dialed back by central banks, interest rates are rising and financial markets have been more volatile. To weather this environment we focus on resilient portfolios, underpinned by quality and ESG.
- Despite rising interest rates, investors remain challenged to meet their income objectives given the high inflation environment. Investors will thus need to seek out diversified sources of income while building resilient portfolios in light of the complex investment landscape.

The Opportunity

- Companies with high ESG credentials often tend to exhibit characteristics of the quality style, and we consider ESG considerations across asset classes to enhance our diversification.
- Adapting the corporate business model to the sustainability revolution helps businesses to enhance its corporate performance and to deliver a better long-term risk/return profile to investors.

- Investors can contribute to and participate in the sustainability revolution thanks to different investment approaches, such as ESG enhanced, impact or thematic investing. This enables investors to generate income in a multi-asset approach, while doing good and supporting the planet.

Why now?

- Given the pandemic and geopolitical tensions around the Ukraine, investors are realising that it is paramount to have a good understanding of a company’s environmental, social and governance dynamics to truly understand a company’s future earnings path and risks.
- Adopting an ESG lens and considering ESG related opportunities and risks should position investors in companies with strong governance, robust business models and healthy earnings streams to maneuver uncertain times.
- Focusing on sustainable companies across asset classes helps to enhance portfolio resilience while generating attractive income and making a societal and/or environmental impact.

The Rise of “S” in ESG

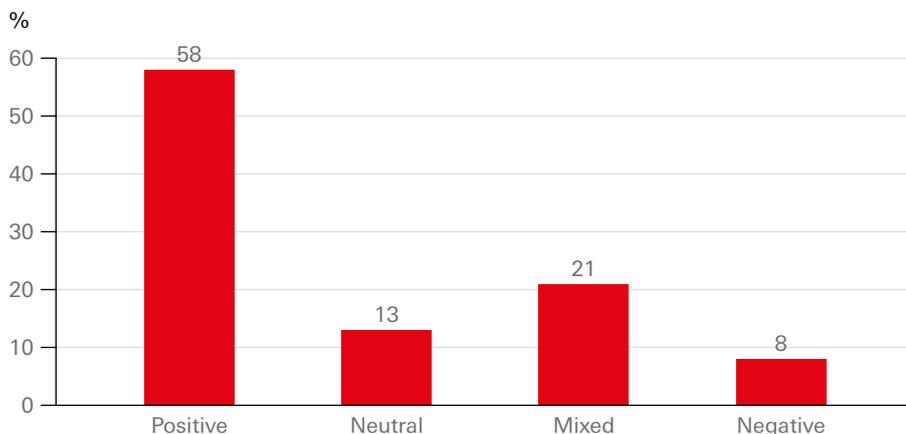
Overview

- The Social factor of ESG investing is rising in importance in the minds of investors and corporates, driven by a variety of factors including the pandemic, COP 26 and the BLM movement.
- The nature of work is changing rapidly as a result of the pandemic and employers need to maintain high standards in their relationships to employees.
- Women’s representation is also rising in the corporate world but it has farther to go.

The Opportunity

- Research suggests that companies with more diversity are more innovative and less prone to making big mistakes.
- The great resignation resulting from the pandemic, saw companies that were flexible and fair with employees rewarded while others are seeing historically higher turnover resulting in the higher administration costs and opportunity costs.
- Social issues such as nutrition, quality of education, clean water and sanitation are all growing in importance as society demands more of their stakeholders.
- Also, the pandemic, and increased life expectancy are highlighting the need for better healthcare. This needs to come at an affordable cost, which is possible more and more thanks to technology and pharmaceutical innovation.

Studies show there is a positive link between ESG and corporate performance



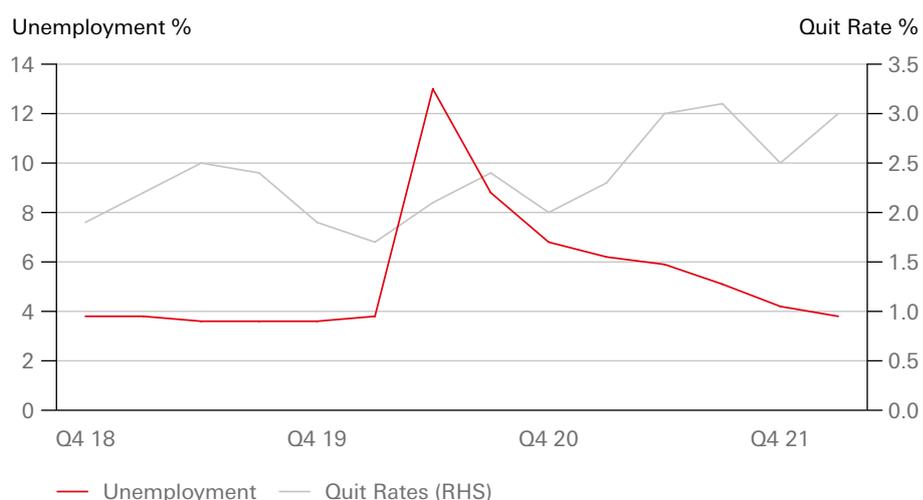
Source: HSBC Global Private Banking, Rockefeller Asset Management, NYU Stern – Center for Sustainable Business as at 31 May 2022.



Why now?

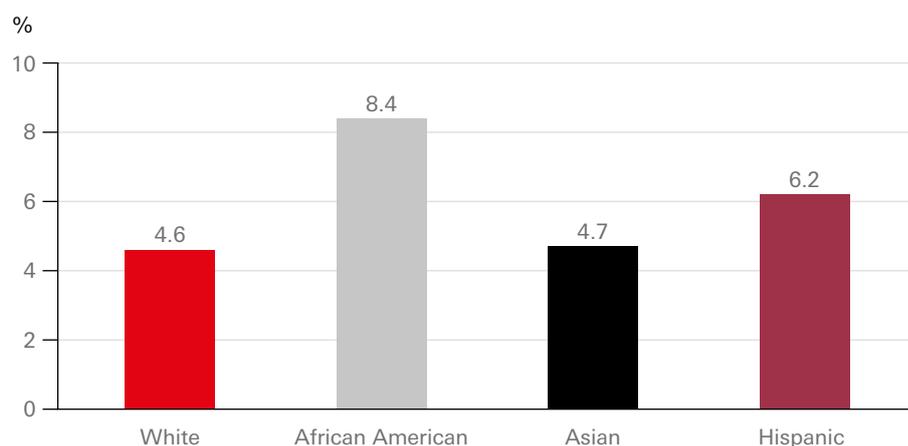
- The COVID-19 pandemic and climate change have been hitting women, ethnic minorities, lower income households and poorer countries harder than others. COP26 raised the profile of women, indigenous populations and minorities as key allies in the fight for sustainability.
- Governments, shareholders, employees, consumers and activists are increasingly demanding that companies integrate all social aspects in their business strategy.
- The great resignation and movements such as black lives matter highlighted the social demand for better practices and companies that support these approaches are being rewarded by consumers.

The Great US Resignation of 2021



Source: Bloomberg, HSBC Global Private Banking as at 31 May 2022.

Respective unemployment rates by ethnicity in the US



Source: Payscale, US Bureau of Labour Statistics, Bloomberg as at 31 May 2022.



Opportunities in Policy Transition

As monetary policy is tightening, and growth and inflation pose challenges for investors, we look for areas with solid earnings and for income, in order to build resilient portfolios.

Our four high conviction themes

1. American Resilience
2. DM Financials – Focus on Subordination
3. Durable Dividends
4. Resilient Carry in High Yield and EM

A slowing cycle – will policy tightening make it worse?

The global economy is facing more than its fair share of challenges. Just as COVID-19 started to ease, and many nations started to 'live with COVID-19', new outbreaks in China led to new lockdowns there. Not only did this put a dampener on hopes of a global reopening, but it also recreates some further supply chain bottle necks, just as there were signs that those were starting to ease. Inflation was widely expected to fall from a peak in March, and while that timing may still be correct, any decline in inflation will now be less sharp.

New supply chain issues are one of the reasons for this, but the further boost to commodity prices due to the Russia-Ukraine war is another reason. And as markets and consumers start to fear that inflation will be stickier than first thought, wage demands are rising, which creates a positive feedback loop that further exacerbates inflation pressures. In some countries like the UK, special factors such as a jump in utility bills can further exacerbate inflation. All of this is weighing on consumer optimism as real wages are squeezed, posing a real threat to consumption levels (voters have protested against the cost of living

crisis too, in several countries). They're also forming a threat to profit margins, and although the earnings season has still been strong, most companies have expressed concern about input costs and we continue to focus on quality stocks with strong market positions.

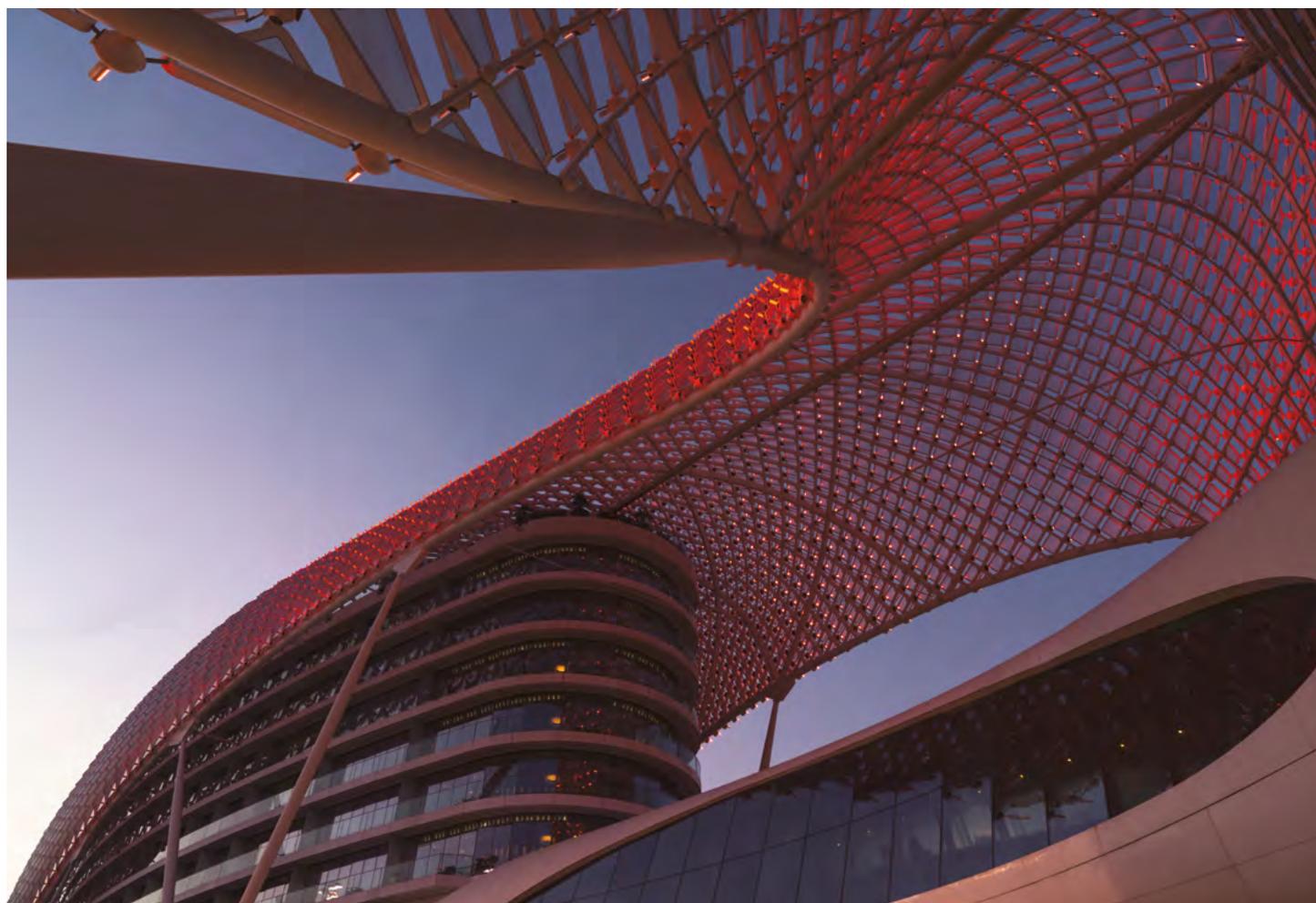
In spite of the slowing cycle, central banks are forced to act to curb inflation, and policy normalisation is now in progress. After the 0.75% worth of US rate hikes so far this year, we expect another 1.50% by the end of the year. In the UK, we expect another two hikes, and in the Eurozone, we believe the ECB will raise rates in October for the first time. This is less than what the consensus expects, and what strikes us is that there currently is a very wide range of forecasts. That's not surprising, in a way, because central banks need to try to crush inflation without triggering a recession, and economists will have

different views on where the tipping point lies above which rising rates trigger a recession. And while economists are unsure, markets continue to worry, favouring quality stocks, defensive sectors and value stocks, pricing in a rising risk of stagflation. In our view, pricing in a rising risk is fine, but it should not be the core scenario: inflation should still come down, and a global recession is unlikely.

Any reasons to be optimistic?

We see three good reasons why a global or protracted recession remains unlikely.

First, the economic cycles of the world's big economies are not synchronised. The US and ASEAN should accelerate in Q2 and Q3. In the US, this is because of a very weak Q1, linked to COVID-19 issues, while ASEAN continues to benefit from the reopening process there. This contrasts with the Eurozone and the UK,

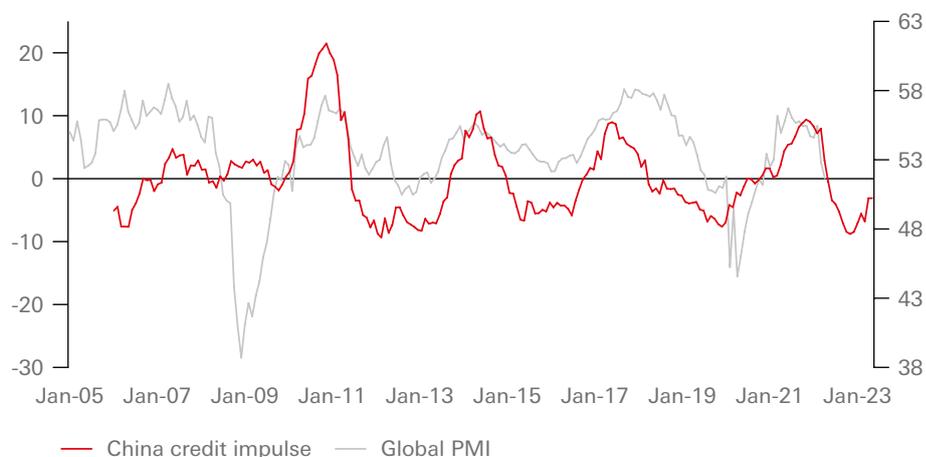


which are seeing a slowdown in activity, because of rising energy costs and utility bills, and the proximity of the Russia-Ukraine war weighing on sentiment. China is at yet another stage of its cycle, with lockdowns weighing on current activity, but past and future stimulus measures likely to lift activity in Q3 or Q4. The slowing European economy may benefit from strong US demand, for example, and the timing of any negative quarters of growth in one region is likely to be different from the timing in other regions. Hence, the risk of a global recession remains low.

Secondly, there is lots of structural support for global growth. Counterintuitively, perhaps, the shocks that created so much damage to the economy (COVID-19 and the Russia-Ukraine war) also trigger the awareness that we must invest to make our supply chains, our energy and commodity supplies more secure and reliable by investing closer to home in new factories, infrastructure and energy generation projects. The sustainability revolution further increases the need for investment and reorients it towards green and sustainable energy. This public and private investment, and consumption of new and more sustainable products, will create new activity and support growth.

Third, we want to show an indicator which is very widely followed, as it tends to be a good leading indicator of the global economy. The Chinese credit impulse, shown below, measures the ratio of loans divided by GDP. It bottomed in October 2021, and we believe it should not only start to help China's own growth in H2; typically, it also leads global growth by about 12 months, which suggests global growth would start to bottom or rebound in Q4.

If the historical relationship holds, the bottoming of China's credit impulse in October 2021 suggests global activity could start to bottom or rebound in Q4

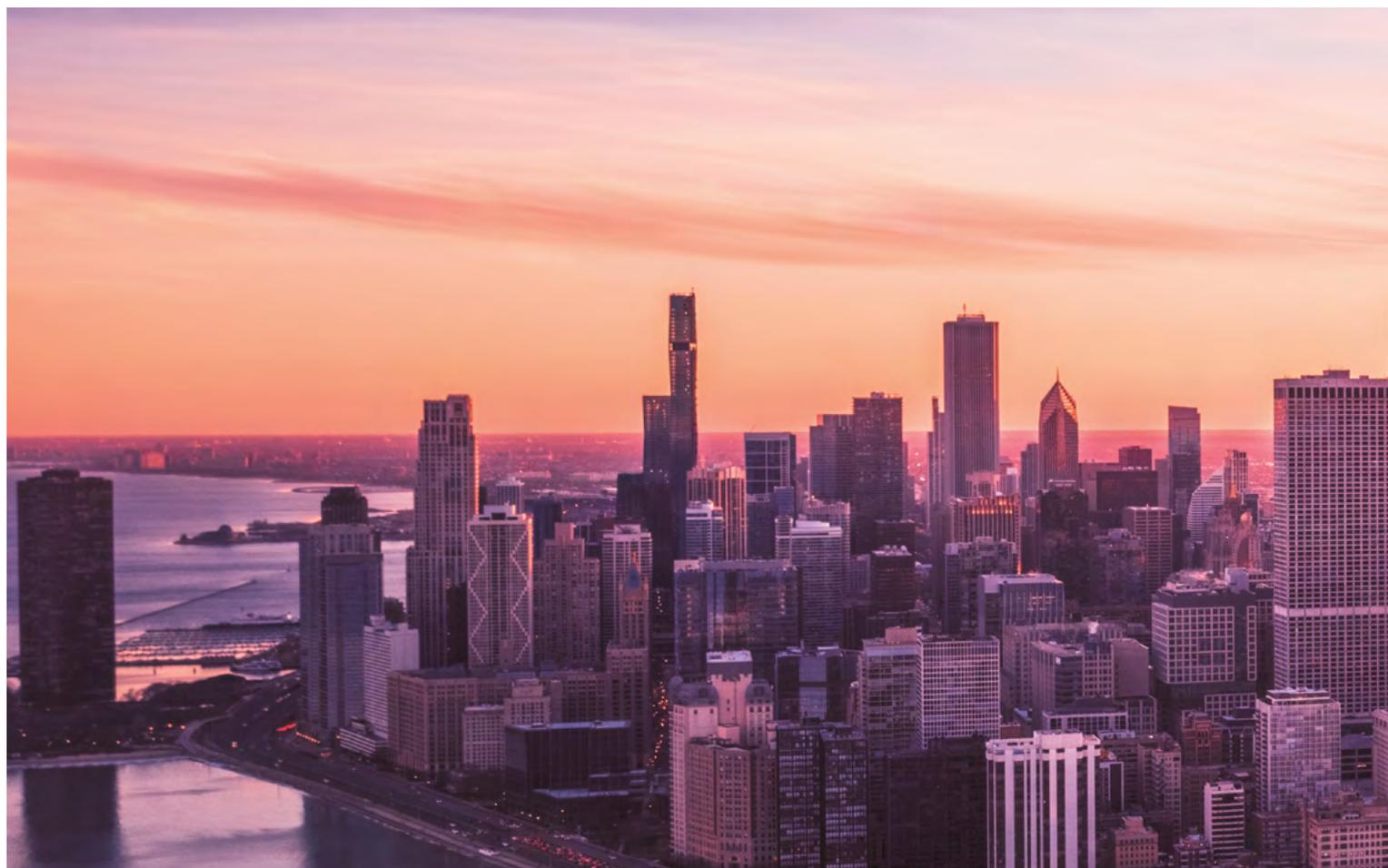


Source: Bloomberg, HSBC Global Private Banking as at 20 May 2022. Note: we have lagged China's credit impulse by 12 months on the above graph.

Investment strategy

Our four High Conviction themes under this trend look to help build resilient portfolios while monetary policy and the global economy are in transition, using three strategies:

- 1) We look for areas with good support for continued strong earnings, and we find this in **American Resilience**, given the country's relatively good cyclical position, and the strength we expect in energy, materials and financials.
- 2) Our **Durable Dividends** theme fits well into current environment as dividend stocks tend to be higher quality stocks and less volatile than the index average. They are generally fall in the 'value' category, which can help investors balance style exposure if they are overweight on growth stocks.
- 3) As market volatility may remain elevated, it is important to remain diversified, and our fixed income themes look for attractive opportunities in the bond market. With more US rate hikes priced in by the market than we expect, we find value in short dated corporate bonds in DM and EM. Specifically, we focus on **DM Financials – Focus on Subordination** and **Resilient carry in High Yield and EM**.



American Resilience

Overview

- The US economy continues its healthy expansion. GDP growth is slowing due to higher inflation and rising policy rates, but demand remains healthy.
- The dramatic decline in COVID-19 cases has improved demand, especially for services.
- Despite tighter monetary & fiscal policy, financial conditions remain accommodative for growth.
- The US economy should benefit from inventory rebuilding, infrastructure spending, sustainability initiatives, and the technology revolution.

The Opportunity

- We remain constructive on US equities, with less cyclical exposure, given the signs of moderating growth.
- Labour markets remain tight and should continue to expand, albeit at a slower pace.
- Services spending is finally above pre-COVID-19 levels, as many long-forgotten services are once again available.
- Consumer financial obligations ratio remains near historic lows, thanks to refinancing.
- Corporate investment in plant & equipment and R&D remains strong.
- Due to persistent inflation, we are focused on sectors that benefit like energy, food, and materials.

- Elevated corporate cash levels continue to expand returns to investors through dividends and share buybacks.
- Valuations have come down while corporate earnings expectations for 2022 and 2023 remain healthy.

Why now?

- The US economy should improve in the second half of the year, as the COVID-19 cases decline and the services sector re-opening should provide opportunities for growth.
- Corporate cash levels are high and profits are forecast to grow well above trend.
- With inflation high, the energy, food, and materials sectors are expected to benefit.



- The selloff in US equities has been quite pervasive, lowering multiples and making US equities more attractive.
- Investor sentiment has become more negative, perhaps signaling a turn in markets.
- We remain focused on quality value opportunities with strong cash levels and low net debt.

Corporate earnings are forecast to rise in 2022 which is supportive of US equities



Note: (E) = Estimates
 Source: S&P Global, HSBC Global Private Banking as at 31 May 2022.

DM Financials – Focus on Subordination

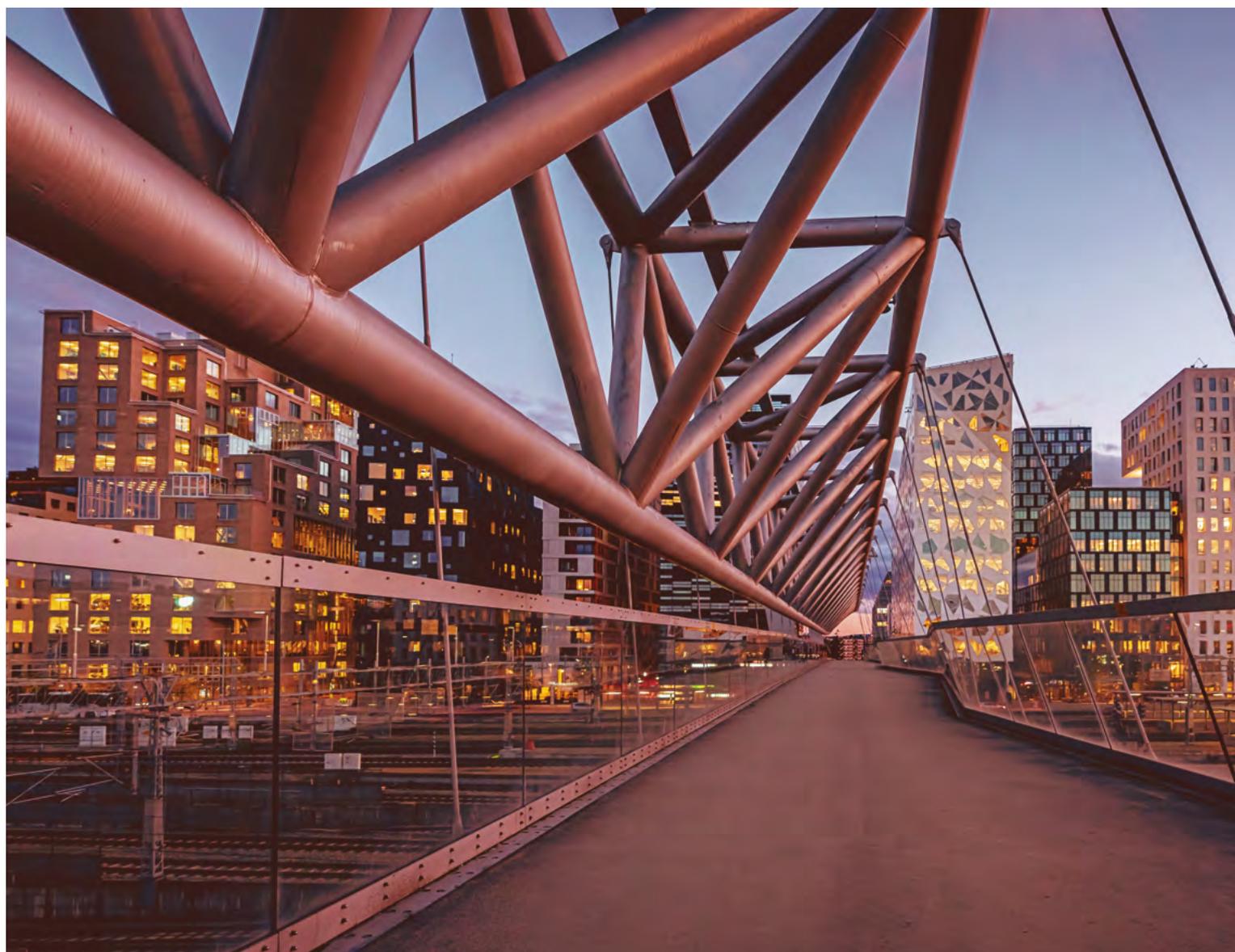
Overview

- The Developed Market Financials sector has been through a period of transformation since the Global Financial Crisis, with a strong focus on capital adequacy. It's an industry wide endeavour which remains in place over ten years later.
- Banks have strengthened their balance sheets significantly in response to stringent regulatory requirements under the Basel III accord, evidenced by stronger capital and liquidity ratios. Meanwhile, asset

quality remains benign owing to a host of targeted fiscal measures during the COVID-19 pandemic and the subsequent rebound in economic growth. Insurance companies have also built large equity cushions in recent years.

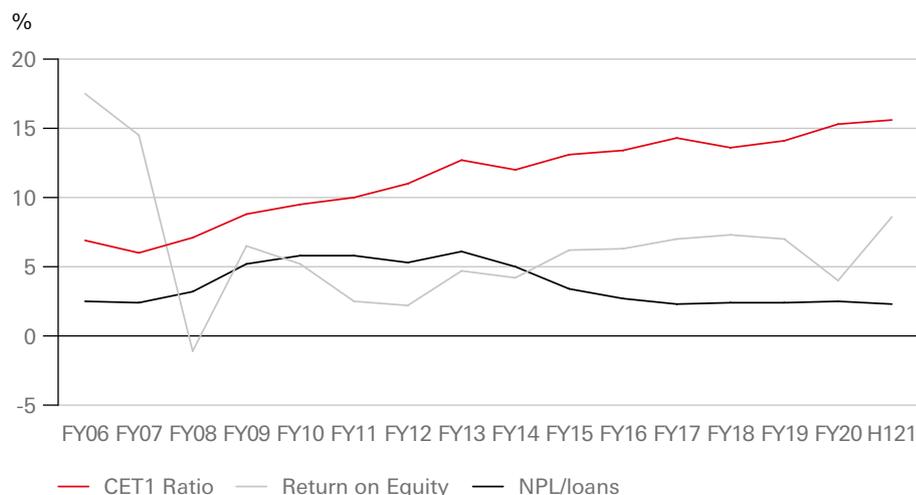
The Opportunity

- Given the strength of fundamentals and in particular capital positions, we view subordinated bonds as a valuable source of carry. Valuations have improved following a recent risk aversion.
- For Banks, we have a preference further down the capital structure



for USD and EUR currency Basel III Additional Tier 1 (AT1) and Tier 2 bonds. AT1 bonds issued by European banks as Contingent Convertibles (CoCos) and US banks in Preferred Stock format provide attractive yields, on a selective basis for banks with high quality fundamentals. We look for large buffers above minimum regulatory capital requirements in order to absorb the impact of rising shareholder returns. At an index level, USD AT1 CoCos yield around 7.4% (spread 443bp), while in EUR index yields are just over 7.0% (spread 642bp), as at 6 May 2022².

European Banks – Fundamental Snapshot



NPL = Non-Performing Loans, >90 days passed without the scheduled payments being made.
Source: HSBC Global Private Banking, Company Reports as at 31 May 2022.

- We also view the risk-reward for Restricted Tier 1 (RT1) CoCos from selected European Insurers as attractive. USD RT1 CoCo index yields stand at 7.1% (spread 400bp), with EUR index yields of 5.7% (spread 486bp) as at 6 May 2022².
- Bank Common Equity Tier 1 (CET1) capitalisation ratios are close to all-time highs across both Europe and the US, averaging 15.8% and 11.5% respectively at FY21. Liquidity is also healthy.

Why now?

- DM banks continue to post good earnings, benefiting from a combination of modest loan loss charges and higher net interest income. Non-Performing Loan ratios should stay low as economic growth is likely to remain above trend in DM nations during 2022.
- The more stringent Solvency II regulation in Europe has been a positive for bondholders, as insurers have since built significant equity buffers and exhibited capital prudence. We estimate that the average Solvency II Capital Ratio (SCR) among insurers stood at 208% at FY21, over double the 100% regulatory minimum.
- Financial exposures to Russia are generally low. For the few European banks with notable operations in Russia, we believe the impact on Group capital from credit losses will be manageable.

² Source: Index data from IHS Markit iBoxx.



Durable Dividends

Overview

- With a more fragile geopolitical environment, risks are rising in the global economy. With rising inflation, slowing growth and rising rates, Durable Dividends³ exposure looks attractive.
- As the global economy is in the mid-cycle stage of the recovery, corporate earnings will slow from the high levels seen in 2021 but dividend growth will likely remain solid in our view due to the resilient and decent earnings growth expected in 2022.

The Opportunity

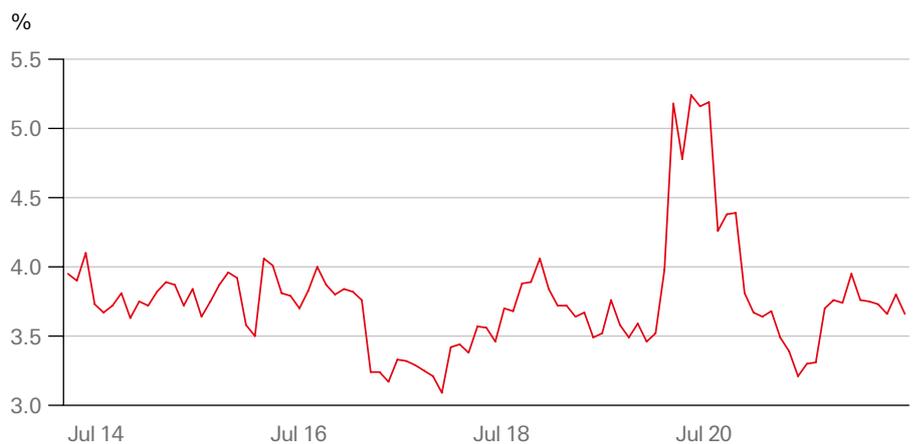
- Dividends offer a bolster against rising inflation, delivering yield to investors at a time when risks are elevated.
- Companies are seeing the demand for yield in the market and are adjusting accordingly. Rising rates will also put pressure on corporates to ensure yield levels remain competitive.
- Economies are still growing out of the pandemic with many regions still not fully back to normal, especially hospitality and leisure. Reopening effects will play through to yield benefits.

Why now?

- Dividend payers are typically more value oriented companies in financials, energy and real estate which should be more insulated to rate rises.
- Investors have been rotating away from long duration strategies towards exposures with clearer sight on nearer term paths.

- Rising rates will raise competition for yield putting pressure on dividend payers to maintain or even grow levels.
- Earnings have been more resilient through the pandemic than many expected and forward earnings are expected to remain healthy supporting dividend levels.

Global Durable Dividend Yield



Source: Bloomberg, HSBC Global Private Banking, SPDR S&P Global Dividend Aristocrats as at 31 May 2022.

³ These are complex instruments with separate eligibility and documentation requirements.

Resilient Carry in High Yield and EM

Overview

- Continuation of the Russia-Ukraine war in the backdrop of already challenging macroeconomic background, high inflation and rising interest rates have led to a significant sell-off in all risk assets. On a relative basis, though, Global HY and EM corporate bonds have shown more resilience, outperforming DM IG, thanks to higher coupon income and lower duration.
- As standalone fundamentals remain robust for many HY and EM companies, we believe resilient HY and EM credits still provide value in diversified portfolios.

The Opportunity

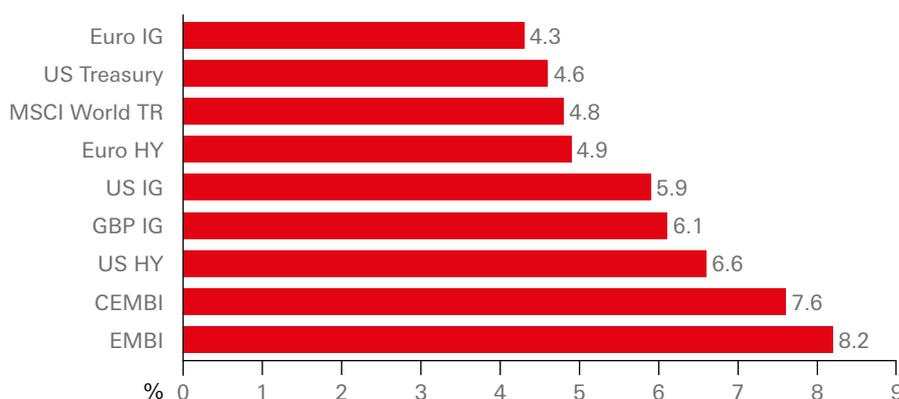
- In the environment of elevated commodity prices and increased inflationary expectations bonds of global HY and EM companies could provide higher yields and diversification for investment portfolios. Credit fundamentals of many companies have improved significantly over last year as earnings recovered strongly and leverage declined. This should secure business and financial stability against a more challenging macroeconomic background.
- Within the thematic, we continue to favour US, European and UK HY with strong balance sheets across Energy, Financial and Consumer oriented sectors, but in a very selective manner. Default rates on US and European HY have dropped to below 1.0%.
- Within EM credit, we focus on GCC and Asia, as GCC should benefit from elevated energy prices while Asia should be more resilient thanks to more diversified economies and supportive domestic policies.

Why now?

- Thanks to a recovery of economic activity last year coupled with a focus on cash generation and de-leveraging, credit metrics of many Global HY and EM companies have improved. As of the end of 2021, the average net leverage of US HY companies is estimated at 3.9x, EM HY at 2.3x and EM IG at 1.2x (based on JPM estimates).

- Historically, DM HY and EM corporate bonds in HC delivered strong returns. Since 2000, the average annual return of US HY bonds amounted to 6.6% and EM credit – 7.6% (based on ICE BOFA US HY index and JPM CEMBI Broad index as of 31.12.21)
- With inflation risks mounting, Global HY and EM bonds in HC provide a meaningful yield pick up of around 300-400bp.

Average annual performance in 2000-2021



Source: HSBC Global Private Banking, Bloomberg, JPM, ICE BOFAML indices as at 31 May 2022. Past performance is not a reliable indicator of the future performance.

Since 2000, the average default rates in US HY and EM HY are 3.2% and 3.6%



Source: HSBC Global Private Banking, estimates as at 31 May 2022. Past performance is not a reliable indicator of the future performance.

Disclaimers

Risks to our View

The key risk factors include adverse regulatory changes, health concerns, spectrum cost and allocation issues excess capital expenditure by telecom operators, trade tensions, evolution of 5G standards, uncertainties in pricing and demand for new products and services in 5G and related offerings.

Risk Disclosures

Risks of investment in fixed income

There are several key issues that one should consider before making an investment into fixed income. The risk specific to this type of investment may include, but are not limited to:

Credit risk

Investor is subject to the credit risk of the issuer. Investor is also subject to the credit risk of the government and/or the appointed trustee for debts that are guaranteed by the government.

Risks associated with high yield fixed income instruments

High yield fixed income instruments are typically rated below investment grade or are unrated and as such are often subject to a higher risk of issuer default. The net asset value of a high-yield bond fund may decline or be negatively affected if there is a default of any of the high yield bonds that it invests in or if interest rates change. The special features and risks of high-yield bond funds may also include the following:

- Capital growth risk – some high-yield bond funds may have fees and/or dividends paid out of capital. As a result, the capital that the fund has available for investment in the future and capital growth may be reduced; and
- Dividend distributions – some high-yield bond funds may not distribute dividends, but instead reinvest the dividends into the fund or alternatively, the investment manager may have discretion on whether or not to make any distribution out of income and/or capital of the fund. Also, a high distribution yield does not imply a positive or high return on the total investment.
- Vulnerability to economic cycles – during economic downturns such instruments may typically fall more in value than investment grade bonds as (i) investors become more risk averse and (ii) default risk rises.

Risks associated with subordinated debentures, perpetual debentures, and contingent convertible or bail-in debentures

- Subordinated debentures – subordinated debentures will bear higher risks than holders of senior debentures of the issuer due to a lower priority of claim in the event of the issuer's liquidation.
- Perpetual debentures – perpetual debentures often are callable, do not have maturity dates and are subordinated. Investors may incur reinvestment and subordination risks. Investors may lose all their invested principal in certain circumstances. Interest payments may be variable, deferred or canceled. Investors may face uncertainties over when and how much they can receive such payments.
- Contingent convertible or bail-in debentures – Contingent convertible and bail-in debentures are hybrid debt-equity instruments that may be written off or converted to common stock on the occurrence

of a trigger event. Contingent convertible debentures refer to debentures that contain a clause requiring them to be written off or converted to common stock on the occurrence of a trigger event. These debentures generally absorb losses while the issuer remains a going concern (i.e. in advance of the point of non-viability). "Bail-in" generally refers to (a) contractual mechanisms (i.e. contractual bail-in) under which debentures contain a clause requiring them to be written off or converted to common stock on the occurrence of a trigger event, or (b) statutory mechanisms (i.e. statutory bail-in) whereby a national resolution authority writes down or converts debentures under specified conditions to common stock. Bail-in debentures generally absorb losses at the point of non-viability. These features can introduce notable risks to investors who may lose all their invested principal.

Changes in legislation and/or regulation

Changes in legislation and/or regulation could affect the performance, prices and mark-to-market valuation on the investment.

Nationalization risk

The uncertainty as to the coupons and principal will be paid on schedule and/or that the risk on the ranking of the bond seniority would be compromised following nationalization.

Reinvestment risk

A decline in interest rate would affect investors as coupons received and any return of principal may be reinvested at a lower rate.

Changes in interest rate, volatility, credit spread, rating agencies actions, liquidity and market conditions may significantly affect the prices and mark-to-market valuation.

Risk disclosure on Dim Sum Bonds

Although sovereign bonds may be guaranteed by the China Central Government, investors should note that unless otherwise specified, other renminbi bonds will not be guaranteed by the China Central Government.

Renminbi bonds are settled in renminbi, changes in exchange rates may have an adverse effect on the value of that investment. You may not get back the same amount of Hong Kong Dollars upon maturity of the bond.

There may not be active secondary market available even if a renminbi bond is listed. Therefore, you need to face a certain degree of liquidity risk.

Renminbi is subject to foreign exchange control. Renminbi is not freely convertible in Hong Kong.

Should the China Central Government tighten the control, the liquidity of renminbi or even renminbi bonds in Hong Kong will be affected and you may be exposed to higher liquidity risks. Investors should be prepared that you may need to hold a renminbi bond until maturity.

Risk disclosure on Emerging Markets

Investment in emerging markets may involve certain, additional risks which may not be typically associated with investing in more established economies and/or securities markets. Such risks include (a) the risk of nationalization or expropriation of assets; (b) economic and political uncertainty; (c) less liquidity in so far of securities markets; (d)

fluctuations in currency exchange rate; (e) higher rates of inflation; (f) less oversight by a regulator of local securities market; (g) longer settlement periods in so far as securities transactions and (h) less stringent laws in so far the duties of company officers and protection of Investors.

Risk disclosure on FX Margin

The price fluctuation of FX could be substantial under certain market conditions and/or occurrence of certain events, news or developments and this could pose significant risk to the Customer. Leveraged FX trading carry a high degree of risk and the Customer may suffer losses exceeding their initial margin funds. Market conditions may make it impossible to square/close-out FX contracts/options. Customers could face substantial margin calls and therefore liquidity problems if the relevant price of the currency goes against them.

Currency risk – where product relates to other currencies

When an investment is denominated in a currency other than your local or reporting currency, changes in exchange rates may have a negative effect on your investment.

Chinese Yuan ("CNY") risks

There is a liquidity risk associated with CNY products, especially if such investments do not have an active secondary market and their prices have large bid/offer spreads.

CNY is currently not freely convertible and conversion of CNY through banks in Hong Kong and Singapore is subject to certain restrictions. CNY products are denominated and settled in CNY deliverable in Hong Kong and Singapore, which represents a market which is different from that of CNY deliverable in Mainland China.

There is a possibility of not receiving the full amount in CNY upon settlement, if the Bank is not able to obtain sufficient amount of CNY in a timely manner due to the exchange controls and restrictions applicable to the currency.

Illiquid markets/products

In the case of investments for which there is no recognised market, it may be difficult for investors to sell their investments or to obtain reliable information about their value or the extent of the risk to which they are exposed.

Disclosure concerning sustainable investments

"Sustainable investments" include investment approaches or instruments which consider environmental, social, governance and/or other sustainability factors (collectively, "sustainability") to varying degrees. Certain instruments we include within this category may be in the process of changing to deliver sustainability outcomes.

There is no guarantee that sustainable investments will produce returns similar to those which don't consider these factors. Sustainable investments may diverge from traditional market benchmarks.

In addition, there is no standard definition of, or measurement criteria for sustainable investments, or the impact of sustainable investments ("sustainability impact"). Sustainable investment and sustainability impact measurement criteria are (a) highly subjective and (b) may vary significantly across and within sectors.

HSBC may rely on measurement criteria devised and/or reported by third party providers or issuers. HSBC does not always conduct its own specific due diligence in relation to measurement criteria. There is no guarantee: (a) that the nature of the sustainability impact or measurement criteria of an investment will be aligned with any particular investor's sustainability goals; or (b) that the stated level or target level of sustainability impact will be achieved.

Sustainable investing is an evolving area and new regulations may come into effect which may affect how an investment is categorised or labelled. An investment which is considered to fulfil sustainable criteria today may not meet those criteria at some point in the future.

Greenwashing risk is defined as giving a false impression or misleading information of a product's climate and environmental friendly credentials and, whilst not considered a standalone risk, can manifest through sales outcomes, marketing materials, product design and external disclosures at product and firm level.

Alternative Investments

Investors in Hedge Funds and Private Equity should bear in mind that these products can be highly speculative and may not be suitable for all clients. Investors should ensure they understand the features of the products and fund strategies and the risks involved before deciding whether or not to invest in such products. Such investments are generally intended for experienced and financially sophisticated investors who are willing to bear the risks associated with such investments, which can include: loss of all or a substantial portion of the investment, increased risk of loss due to leveraging, short-selling, or other speculative investment practices; lack of liquidity in that there may be no secondary market for the fund and none expected to develop; volatility of returns; prohibitions and/or material restrictions on transferring interests in the fund; absence of information regarding valuations and pricing; delays in tax reporting; – key man and adviser risk; limited or no transparency to underlying investments; limited or no regulatory oversight and less regulation and higher fees than mutual funds.

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