Investing for the long term

Preparing for the investment challenges of the future

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The purpose of this paper is to explore key global trends and macroeconomic topics that we believe truly long-term investors such as Sovereign Wealth Funds (SWFs) should prioritize in their investment framework.

What sets apart long-term investors when it comes to the key factors that determine investment success? Different time horizons, risk appetites or institutional constraints give each investor a unique ranking of key factors that are affecting its investment behavior and performance.

This question was the focus of the first UBS-IMD Sovereign Investment Circle, held in 2018, which examined the key factors that are likely to determine investment success for long-term investors over the coming decades. In our upcoming second UBS-IMD Sovereign Investment Circle, March 25 – 29, 2019 we will continue that discussion and look at the key challenges SWFs may face in coming decades.
Academic research shows that global issues account for a large share of explanatory power among the factors that explain long-term company performance.\textsuperscript{1} Therefore, understanding these global phenomena and navigating them will be paramount for investors in the 21st century.

This is a special challenge because global developments are notoriously difficult to predict and measure. It is also worth noting that uncertainty in itself impacts investment decisions, as many investors would even prefer a (mildly) negative, but certain outcome over an uncertain situation with a wide range of outcomes.

In 1921, economist Frank Knight first defined the concept of risk as “Measurable Uncertainty” in his book “Risk, Uncertainty, and Profit”. We now recognize that, when it comes to risk management, measurement is essential, as we can only manage what we can measure. That is why historically, risk management has been considered a finance (quantitative) function.

However, in the last decade, we have realized that the unknowns that have destroyed companies and industries were not risks but uncertainties that came in the form of global trends, catastrophes and systemic crises.

There are several examples of the uncertainty surrounding the impact of disruptive trends. For instance, all incumbent carmakers acknowledge that electric cars are the future with potentially enormous implications for the current business models of today’s leading car manufacturers. But uncertainty remains very high with regards to which business model will ultimately prevail. As recently pointed out by Daimler production chief Markus Schaefer: “We have hybrids, plug-in hybrids, electric cars and maybe robo-taxis tomorrow. It is hard to predict volumes for the best way in an uncertain world…”\textsuperscript{2} Daimler’s strategy for dealing with this uncertainty is to have production plants that can accommodate all types of powertrains, including hydrogen fuel cell cars.


The challenges of explaining long-term performance
Managing uncertainty in our age requires a different mindset and new processes. In the new world that we envision for investors, the use of traditional risk measurement and management frameworks is severely limited. We might need a new paradigm for investing.

We believe long-term investors should recognize key global megatrends that will affect countries, sectors and companies in the decades to come. We argue that long-term analysis that is based on global trends requires moving away from “scenario-thinking” to take into account long-term global trends and to follow them over time, building resilient strategies around them.

**The role of megatrends**

Why do megatrends matter and which are the most relevant for large institutional investors over the next decades?

The chart below shows several key megatrends from the IMD Global Signals universe, which however is only a brief selection from a total of 60 different such signals. A similar, but somewhat more policy-focused set of themes are the Sustainable Development Goals identified by the United Nations. This approach is very much based on the concept of sustainability, which is gradually emerging as an important driver of policy actions and ultimately investment behavior.

These are trends that are both inexorable and persistent. What these trends all have in common is that they should have a meaningful impact on the performance of different countries, sectors and companies over the medium-to-long term, ultimately offering investors extra return opportunities, but also exposing them to a new set of risks and potential disruptions.

**Thematic Investing (IMD Global Signals)**

![Thematic Investing (IMD Global Signals)](image)

Source: IMD World Competitiveness Center. As of January 2019.
Singapore Investment Circle: 2018 results

At the first UBS Singapore Investment Circle we discussed a range of key megatrends and macro developments to assess their impact across sectors and companies and to derive meaningful investment implications for long-term investors such as SWFs.

Using this approach, we identified three key global developments with long-lasting investment implications:

Demographics

The different ways that population structures change across countries will shape the competitiveness of nations. Generally speaking, ageing will likely cause a massive redistribution of wealth across generations and should require responses from both the private and the public sector. This may be amplified by the massive increase in private and public debt levels in several economies (from Europe to China) which in some cases may cause painful readjustments, and some countries may find it hard to satisfy social needs and debt service at the same time. Finally, populism, protectionism and extremism are possibilities in several regions, and individualistic forces may begin to shape political relationships.

Technology

In a world in which data is an asset, those who are able to manage it best should gain a competitive advantage. But the role of information and our ability to process it should radically change as well. This might on the one hand significantly improve for example the accuracy how we measure, value, predict and price events and instruments. But we are also creating a world where decisions by humans may be delegated to more and more autonomous and intelligent systems, and therefore the security of our systems might be exposed to new and highly scalable risks. Agility and resilience will likely be key competencies for companies and investors to survive.

Sustainability

A new paradigm of corporate behavior is emerging where companies move from “exploitation” of resources and stakeholders to fairness. In line with this trend, governance models are accommodating the need to satisfy a broader set of stakeholders’ interests. At the same time, we are redefining globalization and focusing much more on intangible assets (knowledge) than physical assets (commodities and products). Within the broader concept of sustainability, climate change and the rise of green energy may have a direct disruptive effect in particular on commodity-based economies, sectors and companies.

On the following pages we explore how SWFs can incorporate these trends into their investment strategies.
The change in demographics worldwide over the next decades can be twofold. On the one hand, we will likely see decreasing birth rates in some regions. On the other hand, we should experience an increase in longevity. Both factors will likely lead to an increase in the number of non-workers, a trend that may be amplified by key technological developments.

Academic research suggests that products have different consumption age patterns. Therefore, aging should predictably affect the long-term growth rates of demand in a variety of industries. Research also suggests that demand forecasts based on changing age patterns may help predict the level of profitability in different industries in the US.3

Beyond shifts in demand, with a higher number of non-working people in an economy, the GDP per capita should decline, even if the level of GDP remains the same. Therefore, changing patterns of demographics affect the economic growth of an economy. Research in the US suggests that a 10% increase in the fraction of the nation's population aged 60+ is associated with a decrease in economic growth per capita of 5.5%.4

Finally, demographics will impact other key economic variables. Academic research suggests that in the US, equity values are correlated to demographic trends. As Baby Boomers age, they will likely move from investing in equities to selling equities to fund their retirement. All else being equal, this would exert pressure on equity multiples. In addition, research suggests that, given reduced economic growth, the risk-free rate would decline as well. This implies lower expected returns on equities, holding everything else constant.5 One key uncertainty however will be the risk aversion levels of the elderly.

Taking into consideration the global nature of capital markets and the increasing interconnection of both the supply and demand sides of the market, the effects above may be less profound in specific economies and might be more distributed around the world. As a whole, aging may result in a redistribution of wealth across different generations and may change consumption patterns, with needs for new products and services. This would require new investable projects in infrastructure, healthcare and wellness industries, as well as housing, to mention just a few.

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It is also expected that economies that have inclusive institutions, address broad issues of inequality and have a business friendly environment may be able to address these challenges more effectively and efficiently.

In view of the demographic trends, the ability of a country to attract foreign and retain local highly skilled talent will be key to success. The chart below captures the association between two variables. The vertical axis represents the Appeal Factor as a function of the IMD’s World Talent Ranking that quantifies each country’s capacity to attract talent. The horizontal axis is the Social Progress Index, generated by the Social Progress Imperative, which addresses basic human needs, wellbeing, and opportunity levels for different countries. Plotting each country according to their scores in each of these rankings suggests that countries which address the social and environmental needs of their citizens effectively are identified as having high appeal in the world talent pool.

Due to all of these factors, we expect the currently still rather theoretical discussion about ageing to manifest more and more in the form of tangible investment needs. Given the number of investable projects that may be required, we believe that demographics should therefore be incorporated as a key theme in long-term asset allocation processes.

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**Attractiveness and social progress**

![Chart showing the association between Appeal Factor and Social Progress Index for various countries.](chart.png)


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6 Information about the IMD World Talent Ranking as well as the 2018 report can be found at https://www.imd.org/wcc/world-competitiveness-center-rankings/talent-rankings-2018/

7 Information about the Social Progress Imperative index can be found at https://www.socialprogress.org/index/results
Technology
The role of disruption, agility and resilience

As IMD experts at the event outlined, innovation usually falls under one of the following three categories:

A) **Evolutionary** innovations represent a marginal improvement over an already existing product. For example, wireless headsets were an ‘evolution’ of regular headphones; following the introduction of seat belts, airbags continued making cars incrementally safer; the ketchup squeeze plastic bottle improved customer convenience while leaving the core product inside unchanged; and the polaroid camera added an interesting twist to the traditional way of taking pictures.

B) **Revolutionary** innovations bring new products and services to an industry which did not exist before, and satisfy a previously hidden demand. Laptop computers were more than just an evolution of desktops; similarly, electric self-driving cars can be expected to considerably change the nature of mobility going forward.

C) **Disruptive** innovations are fundamental transformations in customers, not in products. They transform industries by creating new customers who did not exist before, and are typically undertaken by players outside of the industry. This happens because incumbents (due to complacency, arrogance, or ignorance) overlook those potential innovations. Because they create new customers, disruptors also define new business models. Disruptive innovations often happen in technology-related industries (Netflix), but also in much more traditional industries (Ikea, Starbucks, low-cost airlines).

Trends like digitization, or more generally speaking, the process of digital business transformation in companies and industries, should create new business models.
We argue that, in order for incumbents to respond to potential disruptions, they must do so before they appear. For that, organizations need to become ambidextrous, which means continuing to exploit their current core businesses, but at the same time providing ample space for innovation. Trends like digitization, or more generally speaking, the process of digital business transformation in companies and industries, should create new business models. Consequently, we will likely witness the emergence of new industries. But how can we, from an investment standpoint, cope with yet unknown sectors?

Agility is paramount to cope with digital business transformation and is a measure of the ability to respond fast to the ideas promoted by them and the flexibility to adapt a business model to cope with these changes. Agility is also an important concept from an investment perspective: the ability to spot disruptors and disrupted can provide opportunities to generate extra returns or avoid permanent losses.

Companies and whole industries can also be put at risk by non-competitive dynamics coming from challenges outside the marketplace, for example in the area of cybercrime. Their business models and processes have to be resilient enough to cope with threats coming from these areas.

Agility is paramount to cope with digital business transformation and is a measure of the ability to respond fast to the ideas promoted by them and the flexibility to adapt a business model to cope with these changes.
Too often, companies confuse being ‘sustainable’ with only being ‘socially responsible’. This however is not true. Sustainability ultimately refers to a firm’s ability to generate long-term value. It thus requires both growth and profitability since growth is a precondition for profit; profit is a precondition for value creation, and value creation is an objective to satisfy all stakeholders. Sustainability is therefore often understood as the need to maintain the triple bottom line: Profit, People and Planet over the long run.

How many firms are truly “sustainable” according to this definition? Preliminary academic research has shown that only about 6% of all firms manage to sustain above-average profitability and growth for a long period of time.\(^8\) That is, out of all firms in the corporate universe in a given year, naturally 25% will deliver above-average profit and growth. However, very few manage to sustain such dominance. Typically margins deteriorate (as a result of competition) or growth cannot be maintained (because innovation renders a business model obsolete).

An important driver of sustainable strategies will likely be climate change, which may have different effects across economies and sectors, and therefore across asset returns. As electrification and de-carbonization advance, fossil fuel demand should decline and countries and industries may be disrupted, with their growth and profitability falling. Whilst the timing of this disruption remains uncertain (according to IEA, oil demand will continue increasing until 2040) the path towards a global economy that is less dependent on fossils appears more and more certain. Countries with a high share of carbon wealth may face slower growth and rising political and social tensions.

The recent increase in the frequency and intensity of extreme events such as hurricanes, floods, droughts and fires has become a growing threat to the sustainability of company operations. According to some estimates, in the 300-plus cities around the globe that generate more than half of the world GDP the impact of climate change will place USD 1.5 trillion of this production at risk.\(^9\)

A warmer earth may create economic disruption with large and growing implications for investors. Commodity-based SWFs are those most exposed investors given that their source of wealth is oil, the underground asset that is being disrupted by climate change. We believe that diversifying climate change risk in the assets that they invest in global markets should become a key driver of their investment strategy in the future. But all investors should incorporate climate change in their investment framework: according to estimates from Carbon Delta, should companies become compliant with the 2015 Paris Agreement, about 7 percent of listed companies are likely to lose 30 percent of their market capitalization as a result of additional regulatory costs.\(^10\) And about 5 percent of the listed companies could see an upside of 30 percent.

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\(^8\) Bris, Arturo and Salvatore Cantale (2015), “The Determinants of long-term profitability and growth,” manuscript.
\(^9\) See “Climate change may leave some equity investors high and dry,” published by UBS and Society, February 2016.
\(^10\) CARBON DELTA is a research firm that specializes in identifying and analyzing the climate change resilience of publicly traded companies. https://www.carbon-delta.com/
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Challenges for SWFs
The key factors discussed in this paper can have hugely beneficial, but in some cases also disruptive or outright destructive effects on sectors, nations or whole regions. Recognizing these effects will be of paramount importance for large institutional investors, but in particular for sovereign investors. The more concentrated the source of a nation’s wealth, the more important is it not only to diversify away from it today, but also to structure the portfolio in a way that is resilient and adaptive to change. This will require agile and resilient investment and portfolio construction styles that can differ profoundly from what investors have experienced during the QE-environment of the past.

Long-term investors such as SWFs have some advantages compared to other liability-driven investors such as pension funds or insurance companies. Given their high-risk tolerance, long investment horizon and the wide range of asset classes they can invest in, SWFs have the ability to ride the megatrends and generate and capture the associated risk premia. This trend is already visible among SWFs which channel an increasing share of their direct investments into technology companies and disruptive innovations. According to the latest IFSWF/Bocconi annual report, SWF direct equity investments into IT-linked sectors increased sharply over the last few years and SWFs are currently large investors in companies such as Uber (USD 3.5bn) or Veritas Technologies (USD 8bn).

SWF Equity Investments in IT-Linked sectors

In the last decade, we have realized that the unknowns that have destroyed companies and industries were not risks.

For example, SWFs are increasingly partnering with private equity funds and other like-minded investors to channel funds towards early-stage investments in the most innovative sectors. Investment manager Temasek has reported that more recently, some of the most innovative and well established SWFs have started incorporating megatrends into their investment framework. Temasek for example states that its current investment strategy is guided by the following investment themes and long-term trends:

- ‘Transforming Economies’ focuses on investments in sectors such as financial services, infrastructure and logistics in particular in China, India, South East Asia, Latin America and Africa;

- ‘Growing Middle Income Populations’ targets growing consumer demand trends through investments in sectors such as telecommunications, media & technology, and consumer and real estate;

- ‘Deepening Comparative Advantages’ seeks out economies, businesses and companies with distinctive intellectual property and other competitive advantages;

- ‘Emerging Champions’ invests in companies with a strong home base, as well as companies at inflection points, with the potential to be regional or global champions.

But the trend towards incorporating global factors such as demographics, country competitiveness, technology and climate change will continue raising some important questions. How can investors adopt a global trends investment framework? Can a long-term strategic asset allocation (SAA) that incorporates global trends be defined and translated into executable investment concepts? Or should these simply be additional “lenses” through which to look at the proposed asset allocation?

We believe that the evolution towards a long-term investment framework based on global themes requires a new mindset. The traditional asset class model is also being disrupted and investors, particularly those with a long-term investment horizon, should adapt to this change. We believe that the changes required are broad and touch upon several aspects of the asset allocation process as well as governance and the necessary skills and mindsets.

The five challenges for SWFs

1. Bottom-up vs. top-down asset allocation approach
2. Passive vs. active investing
3. A new concept of diversification
4. Core vs. satellite
5. Developed vs. emerging markets

Source: UBS Asset Management.
Asset Allocation is traditionally a top-down approach where some key economic and financial variables are used to generate capital market assumptions, i.e., return and risk assumptions of various asset classes. In this approach, asset prices are determined by a set of economic and financial variables such as growth, interest rate and other monetary conditions which affect the performance of all asset classes including fixed income, listed equity and alternatives. Given the return objectives and the risk tolerance of an investor, an efficient asset allocation can be created through an optimization process.

Can megatrends be incorporated into such a top-down approach? As discussed above, their impact may be broad and involves entire industries and sectors.

Identifying megatrends and selecting those which have the largest ability to disrupt, is hard given the complexity surrounding their interaction and the uncertainty when it comes to their impact across sectors and companies. The cash flow discount model often associated with the pricing of assets is very difficult to apply given the complexity and uncertainty surrounding these trends.

A combination of a top-down approach with a bottom-up approach might be therefore required. Through the top-down approach, the themes may be identified and those with the largest disruption potential should be prioritized. These themes are used in the bottom-up approach to invest in stocks that benefit from the themes and to avoid investing in stocks most exposed to the negative aspects of the trends.

In the table below, the result of such an approach is shown, by using the UBS Global Wealth Management Long Term Theme universe as of year-end 2017 which is filtered from the overall MSCI World ACWI index. When comparing the resulting Long Term Theme universe to the overall composition of the MSCI World ACWI index at the same point in time, we see a much higher tilt towards Information Technology, with Financials and Energy dropping significantly. The use of UBS GWM LTT in selecting stocks also leads to a different regional composition, with emerging markets representing a much higher share of the total.

<table>
<thead>
<tr>
<th>Sector</th>
<th>MSCI ACWI (%)</th>
<th>LTT universe (%)</th>
<th>Delta (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>18.1</td>
<td>37.6</td>
<td>19.4</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>12.0</td>
<td>10.0</td>
<td>-2.0</td>
</tr>
<tr>
<td>Financials</td>
<td>18.7</td>
<td>6.9</td>
<td>-11.8</td>
</tr>
<tr>
<td>Health Care</td>
<td>10.7</td>
<td>13.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Energy</td>
<td>6.4</td>
<td>0.2</td>
<td>-6.2</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>8.7</td>
<td>8.5</td>
<td>-0.3</td>
</tr>
<tr>
<td>Telecommunication Services</td>
<td>3.0</td>
<td>0.4</td>
<td>-2.6</td>
</tr>
<tr>
<td>Materials</td>
<td>5.5</td>
<td>4.0</td>
<td>-1.5</td>
</tr>
<tr>
<td>Industrials</td>
<td>10.9</td>
<td>14.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Utilities</td>
<td>2.9</td>
<td>3.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Real Estate</td>
<td>3.1</td>
<td>0.9</td>
<td>-2.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>MSCI (%)</th>
<th>LTT universe (%)</th>
<th>Delta (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>55.5</td>
<td>50.1</td>
<td>-5.5</td>
</tr>
<tr>
<td>Europe</td>
<td>20.7</td>
<td>19.4</td>
<td>-1.4</td>
</tr>
<tr>
<td>APAC (ex China)</td>
<td>14.9</td>
<td>7.9</td>
<td>-7.1</td>
</tr>
<tr>
<td>EM</td>
<td>8.8</td>
<td>22.7</td>
<td>13.9</td>
</tr>
</tbody>
</table>

 Indicates overweight to benchmark.

Source: MSCI, UBS 2018. Based on allocations at comparable year-end 2017 dates for index and investable universe.
Passive vs. active investing

Passive investment has grown sharply over the last few years as investors took advantage of the cheapest way to get exposure to the market. While SWFs are a very heterogeneous class of investors, a common trend among them has also been an increasing reliance on passive instruments to invest in global markets. This is particularly true for the largest SWFs which invest the bulk of their core exposures passively.

Passive investing has served these institutions well during the QE years, which were characterized by low volatility and repressed risk premia. We believe that this is unlikely to be the case in the future given the changing macroeconomic conditions, particularly the end of ample liquidity and low interest rates.

Overall, the replication of indexes based on market capitalization might be a poor strategy when LTT themes are included in the investment framework. As shown on the previous page, the investible universe for stocks selected on the basis of LTT appears very different from that based on market cap weightings. A more active approach to define the investable universe might therefore be required to position a portfolio for the key trends of the future.

The inclusion of sustainability overlays in the security selection process of many funds is already an important step in this direction. We expect that key trends such as demographics (i.e., ranking countries according to demographic profiles) will be included even more aggressively in the portfolios of leading global investors, further changing the characteristic of passive portfolio and further blurring the borders between active and passive strategies.

We expect that key trends such as demographics (i.e., ranking countries according to demographic profiles) will be included even more aggressively in the portfolios of leading global investors.
It is often said that diversification is the ‘only free lunch’ provided by the markets. Indeed, diversification is an important concept in the traditional asset allocation model. Through diversification across asset classes, an investor can dramatically improve the risk-adjusted return of a portfolio. However, diversification across asset classes does not necessarily allow diversifying the risk associated with themes such as those arising from emerging technologies or climate change which have the potential to disrupt industries, companies and countries.

One recent example is the entry of one of the major disruptors of our time, Amazon, into the food retail sector in 2017. Amazon’s acquisition of Whole Foods led to a significant reaction in the Food Retail index, and should the new business model of Amazon prove successful, it might well be that some of the incumbent firms operating in the retail food sector will never “revert to their mean” again, thus causing a permanent loss to investors.

The concept of diversification should therefore be broadened to incorporate key themes which in the long run might help to reduce risks and capture opportunities. Another example discussed during the event was the ‘true’ exposure that a generic portfolio might have to the rise of electrical cars. This exposure is likely to span across multiple asset classes, different sectors, companies and countries, and the impact might not be immediately intuitive or predictable. For example, could there be a major impact on the real estate sector or state finances?

**Challenge**

Dow Jones Industrial Average vs Dow Jones Food Retail index (2017, %)

Source: Bloomberg 2018.

Amazon acquires Whole Foods
The core and satellite investment approach is very common among SWFs. In this approach, the bulk of the assets are invested passively according to traditional asset allocation approaches and provide exposure to the beta of the market. The satellites are often associated with more active and illiquid asset classes and are aimed at providing alpha to the entire portfolio. Satellite strategies often include investments into venture capital or private equity, or the search for unicorns in the most innovative and disruptive sectors.

Satellite investments generally represent a relatively small share of the total portfolio, particularly among the largest SWFs. As soon as an institution manages hundreds of billions, investing the core passively is almost inevitable. This leaves the bulk of the portfolio exposed to the long-term impact of megatrends. Shifting to long-term investing involves having a look through the core part of the portfolio with a megatrend lens to at least attempt to reduce in long term risk.

SWFs are however also among the largest investors in private markets, given their long-term investment horizon and their ability to take up liquidity risk. Picking the winners from megatrends is very difficult when investing is restricted to listed markets, as new business models often emerge from non-listed companies. Investing in agile companies in listed markets is difficult as the majority of them often delay IPOs or remain private. That is why many SWFs have already become an important source of capital for private equity firms or for large global growth equity funds with a specialization on specific themes. As Bloomberg has reported for instance, the Public Investment Fund of Saudi Arabia and Abu Dhabi-based Mubadala Investment Company are among the largest investors in the over USD 90bn Softbank Vision Fund which has a focus on technology and innovation.

The problem is that private markets, despite their strong growth over the last decade, are not scalable. How can large SWFs better position their portfolios to megatrends given the limited amount of capital that can be deployed privately? One approach would be to narrow the investible listed equity universe by selecting a restricted number of agile companies expected to outperform over the long-term. These equity strategies are often defined as concentrated strategies and rely on the skills of the manager to identify those stocks which have more growth potential.
SWFs’ higher-than-average exposure to emerging markets makes sense on the one hand, given that the bulk of global growth is currently coming from China and other emerging markets (EMs). Also, from a demographic point of view, some emerging markets have a positive demographic dividend given their higher share of active population when compared to developed economies.

When other megatrends are included, however, the question of EM vs. DM becomes less clear. For instance, the US and other advanced economies still have an advantage in technology and innovation, and their sectors and companies could benefit more from these trends relative to their share of the global GDP.

### The past and the future of asset allocation for long-term investors

<table>
<thead>
<tr>
<th>Traditional asset allocation</th>
<th>Long-term asset allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong focus on economic and monetary factors</strong></td>
<td><strong>Reflect diverse and interlinked set of trends that may affect society and environment in the future</strong></td>
</tr>
<tr>
<td>Only considered megatrends when they have a clearly measurable impact on economic factors (e.g., demographics).</td>
<td>In a truly globalized world, consideration of geopolitical, technological and sustainability challenges are crucial.</td>
</tr>
<tr>
<td><strong>Short-termism in the investment and corporate community</strong></td>
<td><strong>Long-term thinking</strong></td>
</tr>
<tr>
<td>Trend following and quarter/year-end effects (window dressing) prevalent in financial markets. Companies investing in share buy-backs instead of equipment or employee education.</td>
<td>Be guided by megatrends seeking to avoid disruptions for key portfolio holdings and to capture long-term growth opportunities. Do not mix up long-term trends with hypes!</td>
</tr>
<tr>
<td><strong>Market-cap based benchmarks and passive replication</strong></td>
<td><strong>Unconstrained bottom-up approach</strong></td>
</tr>
<tr>
<td>The broader the index, the more diversified and safe the portfolio?</td>
<td>Diversify not through a benchmark, but a pool of good long-term ideas.</td>
</tr>
<tr>
<td><strong>Mean reversion</strong></td>
<td><strong>Protect against disruption leading to sudden and permanent loss of capital in your portfolio</strong></td>
</tr>
<tr>
<td>Diversification and rebalancing decisions driven by variance-covariance optimizations and mean reversion.</td>
<td>Assets can mean revert for a long time – until they don’t. Risk management means being aware of disruption risk.</td>
</tr>
<tr>
<td><strong>Private/listed markets</strong></td>
<td><strong>Private markets</strong></td>
</tr>
<tr>
<td>Diversification across listed liquid equity and fixed income markets allows investors to position themselves on the efficient frontier given their risk and return expectations. Private markets provide additional alpha.</td>
<td>Capturing the return opportunities provided by disruptive trends requires investing more in private markets from where new business models often emerge. Capturing the unicorns.</td>
</tr>
<tr>
<td><strong>Governance and incentives: herd mentality</strong></td>
<td><strong>Governance and incentives: look for long-term value</strong></td>
</tr>
<tr>
<td>Sponsors and clients expect performance close to popular benchmarks, with tracking errors and drawdowns not exceeding industry standards.</td>
<td>Long-term investments are particularly strong when combined with counter-cyclical strategies – but are sponsors prepared to go against the trend? And for how long?</td>
</tr>
<tr>
<td><strong>Conservatism</strong></td>
<td><strong>Innovative approaches</strong></td>
</tr>
<tr>
<td>Very similar strategic asset allocations (SAA) within comparable institutional sectors lead to very similar and therefore (slightly below) average results.</td>
<td>A (conservative) core tranche has to be augmented with innovative satellites entirely focused on capturing the opportunities of megatrends.</td>
</tr>
</tbody>
</table>

Source: UBS Asset Management.
Long-term challenges require a shift in skills and mindset

SWFs should develop expertise in technology, regulations, social media and big data, to name just a few skillsets, to assess investment opportunities, minimize risks and to construct portfolios for the long term.

We invite you to join our multi-disciplinary experts as we continue the discussion of how SWFs should adapt to incorporate these key global trends into their investment approach.

2nd annual UBS Asset Management-IMD Sovereign Investment Circle
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Singapore Command House

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