ALVARIUM

Time for Assessment & Reassessment

July 2020

In a period of tremendous uncertainty, with stock markets rallying strongly from the lows of March, our clients are asking how they should think about their positioning. By taking a long-term view, we believe clients can create resilient portfolios that can benefit from structural changes that are playing out across the globe. The thoughts below highlight what we see as important macro-economic and investment trends and how we believe investors can ensure portfolios are well-positioned.

In summary, our thoughts are:

- Policy response will aid a recovery.
- A long-term view and focus on quality are important.
- Private markets will play an increasingly important role in client portfolios.
- Some megatrends that could drive outsized returns looking forward:
  - Real estate may be the new fixed income.
  - Digitalisation is here to stay.
  - Sustainable investing is the new norm.

One clear message from this piece is that we are actively seeking and analysing investment opportunities beyond public markets as a way to benefit from the increase in potential returns and more diversified exposure to megatrends that private markets can provide.

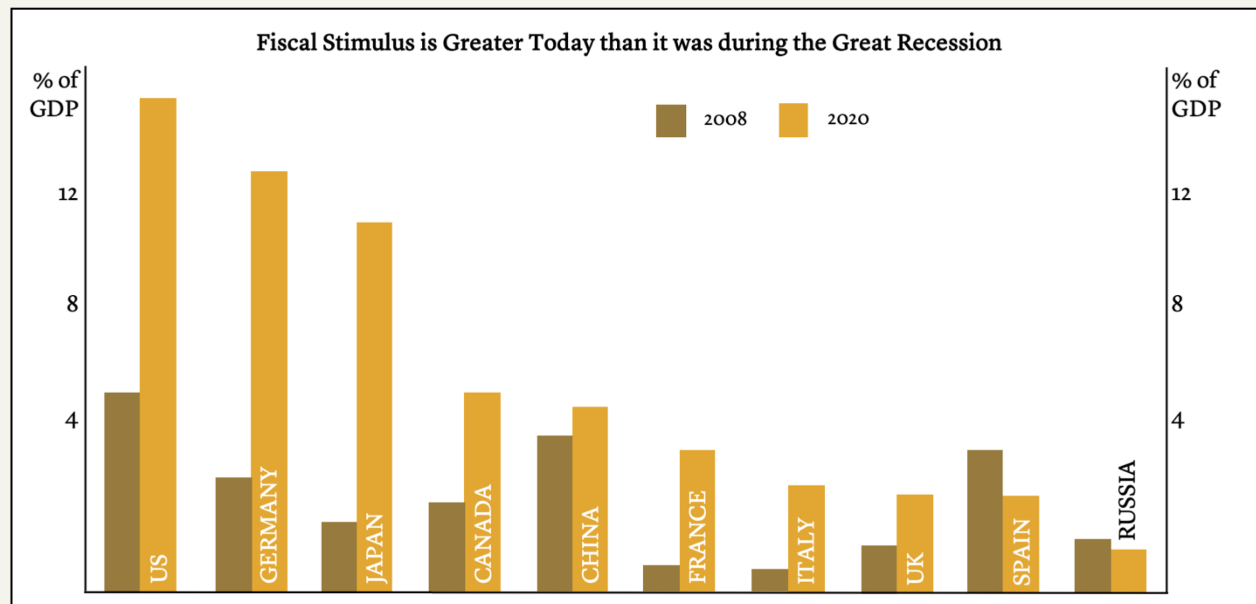
Policy response will aid a recovery

Covid-19 has spread around the world with a vengeance, causing one of the greatest economic downturns since the Great Depression. Economic activity all but stopped as economies shut down and consumers and businesses adopted to a world of virtual collaboration. Global developed economies fell anywhere between 20% and 25% in the second quarter on average and are likely to end the year close to 5% lower than in 2019, meaning a cumulative $12trn of GDP will have been eradicated. Overall, this would leave 2021 GDP some 6.5% lower than in the pre-Covid-19 projections of January 2020 (IMF Forecast).

Were it not for the unprecedented response of policymakers, the downturn and economic pain would likely have continued and been much worse. However, this deep recession was not caused by economic excess but rather an unforeseen virus and thus – as with what has happened in past periods of exogenous events, war or natural disasters – governments and central banks have come to the rescue.

The policy response so far has been unprecedented as both fiscal and monetary levers have been used to arrest the decline. Already some $10trn of fiscal stimulus has been brought to bear, largely supporting incomes of consumers, giving businesses access to credit and offering a range of other incentives to encourage spending and the rehiring of furloughed workers. Meanwhile, central banks have and will continue to shower the market with liquidity. In the US, for example,

the assets on the Fed's balance sheet now top $7trn, up from $4trn at the start of the year. For its part, the US federal budget deficit, forecasted to be $800bn in January, is now estimated to be $3.8trn or close to 18% of GDP for the current fiscal year.



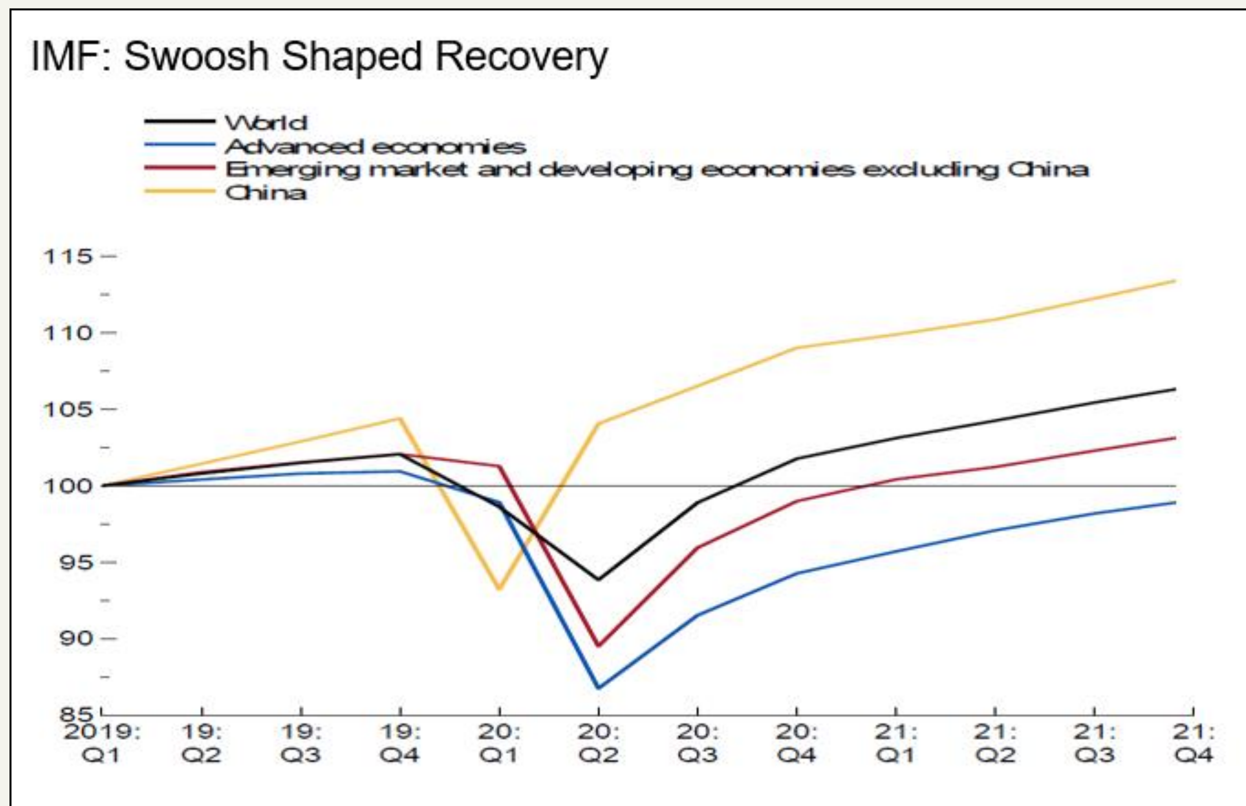
Source: BCA

We think the policy support – buttressed by a blurring of fiscal and monetary policy – will continue and aid an economic rebound.

The shape of the rebound is a subject of great debate and uncertainty. Our current thinking aligns with the recent forecast of the IMF: 'swoosh-shaped' as the world moves from deep recession to an initial V-shaped rebound as economies reopen, followed by a deceleration in the pace of economic activity. We already see validation of the sharp recovery as economies reopen; high-frequency data around the world has shown a similar picture of an initial V-shaped rebound.

We expect a deceleration in the rate of growth as the year progresses, with a full recovery back to pre-Covid 19 levels sometime in late 2021. Bouts of reinfection may cause parts of economies to partially shut down again, as we have recently seen in the US, Australia, Japan and China. Social distancing and embedded business and consumer caution will also mean a slower pace of growth once we have passed the initial economic burst. We expect the hardest-affected sectors – such as tourism, travel, hospitality and entertainment – to face a fragile and tenuous recovery for some time to come.

Forecasting is fraught with uncertainty, but the IMF's latest economic update, per the chart below, aligns with our thinking.



Source: IMF

The wild card of course is progress on a vaccine, which could accelerate the nature and shape of the recovery. Recent news from companies such as Moderna, in terms of progress in clinical trials producing antibodies, could be an economic game-changer – and we are monitoring this closely.

However, the fiscal stimulus supporting the recovery has clearly ushered in rising debt and deficit levels globally – and at some point there will need to be a reckoning. For now, central banks will keep rates low to finance increased indebtedness, just as they did after the Second World War. But at some point this could result in rising levels of taxation, particularly for the wealthiest part of society, and perhaps rising levels of interest rates and inflation with a medium-term view.

The post-pandemic debt legacy will need to be paid for one way or the other.

A long-term view and focus on quality are important

Recent action in stock markets has been nothing short of astounding in historical terms. After one of the greatest declines in markets since the Global Financial Crisis, stock markets around the world have recouped much of their losses, led by the US. Performance during the second quarter was the best in decades as stock markets responded to clear signs that policy action and waning of the virus were causing economies to rebound. **We think the economic bottom**

probably occurred in April this year, meaning the Covid 19-induced recession will be the shortest recession and economic downturn in history.

Staying invested during the turbulence has been the right decision for clients. As seen in the chart below and using the S&P 500 by way of example, remaining invested and maintaining a long-term view through the gyrations of this year has been right, as missing the best five days of market performance would have cost an investor 30% less in return.

Hazards of Ill-Timing

Investors sitting out S&P 500's best five days would have suffered a 30% loss

We expect volatility to remain a feature of markets as investors continue to weigh up positives and negatives amid the plethora of new economic, political and health information emerging every day. More speculative investors may try to time market rises and falls. Recently, markets have seen an explosion in retail day trading in the US. Investment in passive indices may exacerbate volatility as frequent investment and redemptions can cause heavily weighted sectors within the index to experience random market gains and falls. We recommend maintaining allocations appropriate to long-term objectives.

However, not all stocks are created equal in this environment. Central banks have committed to keeping rates low, both to assist the recovery, help finance the ever-increasing level of fiscal deficits and prevent current high levels of indebtedness and low inflation to stumble into debt deflation. The most highly valued stocks in low-inflation, low-interest-rate environments are those which have the highest growth and most sustainable level of cash flows. Hence, this environment favours companies that possess a long-term sustainable competitive advantage, exhibit low cyclicality, serve customer demand with a clear and unique selling proposition and demonstrate high returns on capital employed.

Active managers who can invest with conviction should be best positioned to identify quality companies, with powerful franchises that are able to grow their market share. Leading companies with outstanding value propositions will remain in demand in this winner-takes-all world. **Though we caution, trees don't grow to the sky and the market valuations are getting expensive for these shares. Note the US market is trading at close to 25x price to earnings multiple; companies now need to deliver earnings growth, looking forward to 2021, to justify continued gains in share prices.**

Moreover, if economic growth should significantly surprise on the upside and inflation increases from here, other more real economy companies could well outperform. This reflationary trend would be accelerated by any significant weakness in the US dollar. We will monitor these developments as potential reasons to alter our country allocations. Markets outside the US have a higher proportion of these more cyclical type of shares and benefit from US dollar weakness; this may warrant a greater allocation to markets in the rest of the world over time. Still, we will maintain our quality bias.

Private markets will play an increasingly important role in client portfolios

We also think that now is a good time for clients with a long-term time horizon and multi-generational wealth to reassess their allocation to private markets. We believe that an allocation to privates, as a core component of a client's portfolio exposure, will not only help enhance returns looking forward, but also diversify risk and reduce a reliance on public market concentration and volatility.

The traditional wealth allocation of 60% in stocks and 40% in bonds, favoured since the proliferation of modern portfolio theory in the 1950s, has produced one of the best risk-adjusted returns of the past three decades. It has served clients well over the past decade, in particular, and has continued to do well this year. **However, we expect lower returns for both equities and government bonds <u>at the index level</u> over the next 10 years.**

This is not to say that stocks and bonds should not be owned, but rather that the returns we expect from them can be further improved upon. Thus, we recommend:

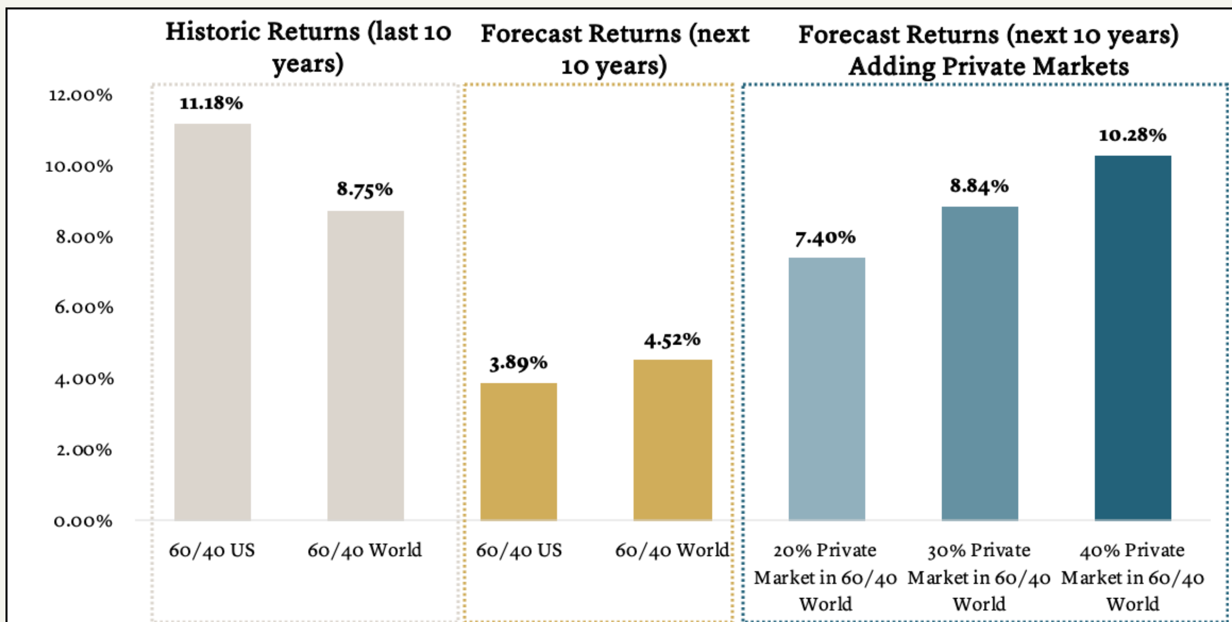
- **A focus on active management in liquid equities and bonds to find those areas of the market likely to deliver better than index returns. As delineated above, we think companies with leading franchises and strong returns on capital – in sectors such as the innovation economy, healthcare and renewable energy – will be favoured.**
- **We also recommend embracing a wider asset class opportunity set to deliver returns, by including a meaningful allocation to private markets.**

In the chart below, we show the historical returns of the 60:40 stock/bond allocation for both the US and World markets. The long-term historical return for 60:40 stock/bond allocation is

around 6% (again using only index returns). Hence, investors in essence have over-earned during the past decade, by achieving close to 12% for a US investor and 9% for an investor in World markets. The forecast return over the next 10 years is unsurprisingly lower, particularly given where bond yields are today.

As shown in the blue below, we illustrate the expected return over the next 10 years from an allocation of 20%, 30% and 40% to private markets, with the allocation being funded by reducing liquid stocks and bonds in equal proportion. Our analysis is focussed on being able to **access both public and private markets** through top quartile active managers to **achieve returns similar to those which were generated over the past decade.**

Adding Private Markets Can Enhance Return

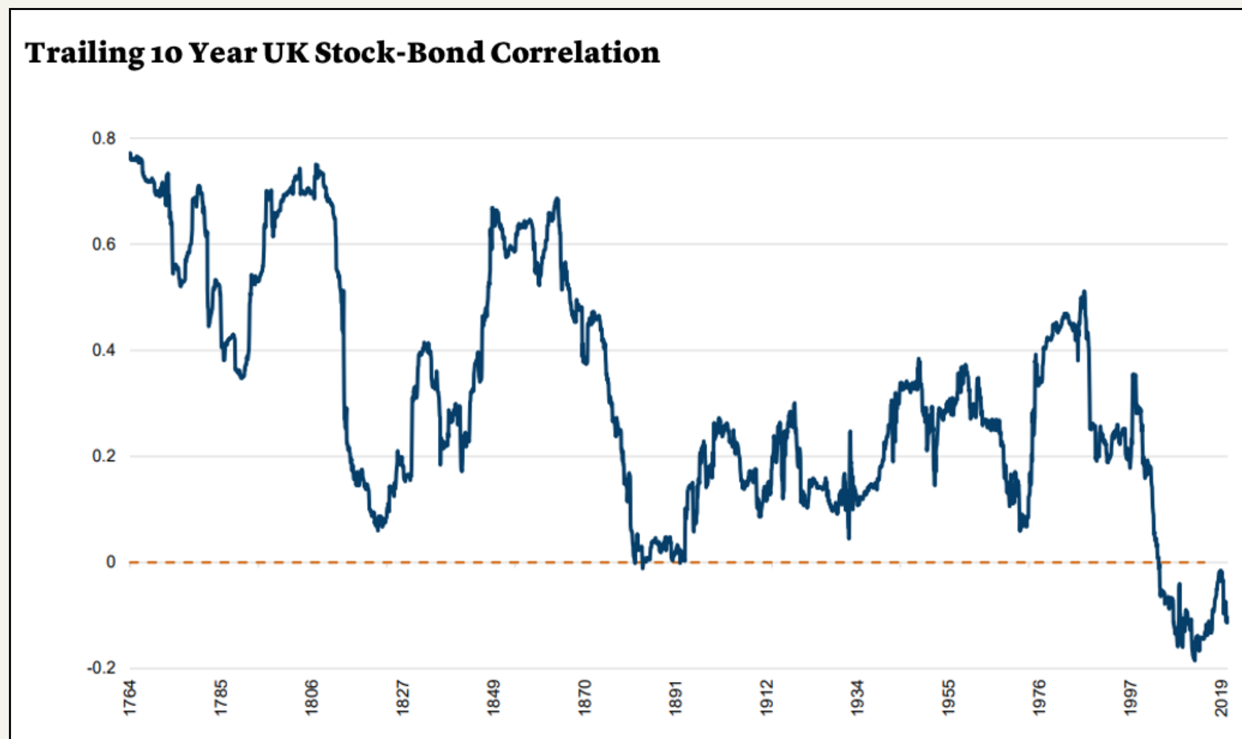


Source: Alvarium Capital Markets Assumptions; Cambridge Associates and Morningstar for market returns

This makes the exercise of investing more a challenge but also something that we relish at Alvarium, given our expertise and strong track record of investing through both public and private markets.

Bonds and stocks, moreover, have enjoyed a negative correlation over the past 25 years, meaning that investors have benefited from the inherent diversification benefits of owning both. During this period, as stocks declined, bond prices have tended to rise and vice versa, cushioning market volatility.

As seen on the chart below, this negative diversification is a recent phenomenon. For most of history (chart dates back to 1784), stocks and bonds have been positively correlated. **A sudden sharp rise in interest rates or inflation at some point could see both stocks and bonds fall at the same time.**



Source: MAN Research

We believe an allocation to privates may also be an important way for clients to replicate longer-term strong returns in an uncorrelated way, particularly those clients who are comfortable with this asset class's less liquid nature.

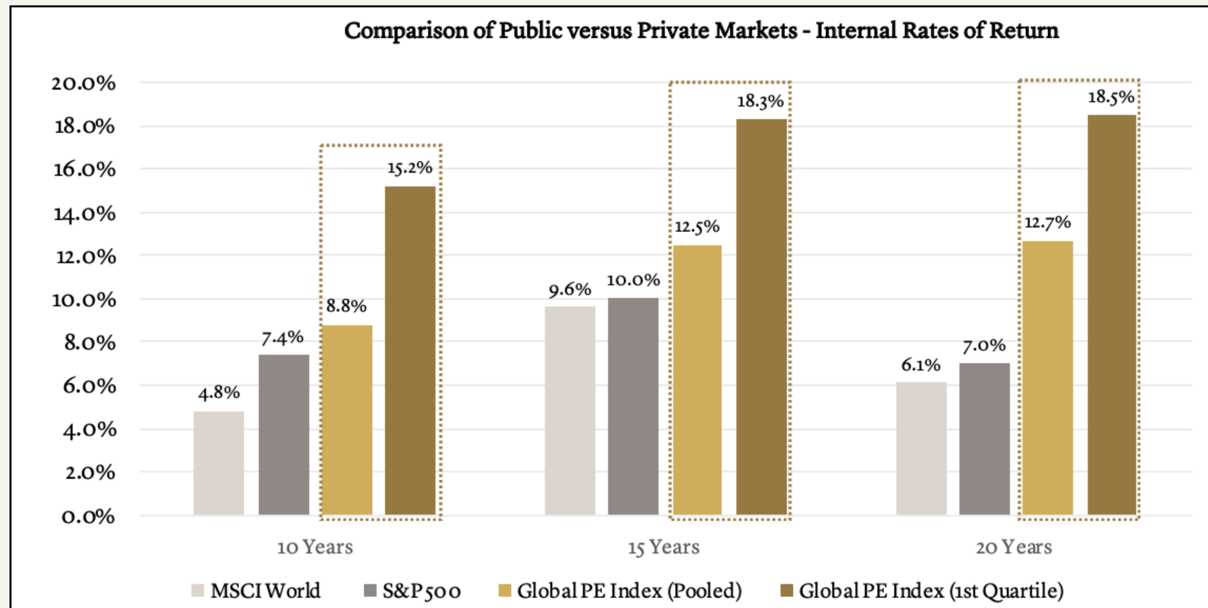
There is also a strong relationship between high allocations to private markets and superior long-term returns. According to Cambridge Associates, endowments and foundations in the top quartile of performance had one thing in common: a minimum allocation of 15% to private investments. Whereas the typical high-net-worth investor has less than a 5% allocation on average.

In addition, private markets allow investors to access powerful secular themes in a more diversified way. Notably, there are only about 3,600 public companies today (-50% since 1996); in contrast, private companies are growing in number, with more than five million private companies in the US today, for example, accounting for over 50% of US employment. And as the number of public companies has declined, public companies have grown in size. **Today, the top five US companies – Apple, Microsoft, Alphabet, Amazon and Facebook – make up 23% of the total market capitalization of the S&P 500, the highest percentage in history,** and recent markets gains are largely dominated by this same handful of firms. Apple and Microsoft, which surged 86% and 55% in 2019 respectively, together accounted for nearly 15% (or half) of the S&P 500's advance last year. No other stock even came close to their contribution. This may be a natural outcome of technological innovation, which has allowed the most productive and profitable companies to dominate. But it does mean that investors' holdings may be overly concentrated in fewer firms.

Therefore, in our view, an allocation to private market investments, as part of a client's overall growth equity and real asset allocation, has the following competitive advantages:

- Greater diversification and enhanced expected long-term returns.
- A focus on investment teams that can also add valuable operational and strategic expertise to unlock value for their portfolio companies and investments.
- Longer-term mindset as private companies can benefit from strategic business building and not just quarter-to-quarter earnings.
- A portfolio with diversified returns streams as private market managers tend to raise capital, selling assets as markets are rising. This means they can underperform rising markets, but have dry powder to invest in periods of economic dislocation. Public managers will remain largely invested through a bull market period, capturing most of the upside of strong markets, but have larger downside than private managers in periods of significant market decline.

Over the long term, these advantages have allowed private market managers to outperform public markets (see chart below) and we expect this trend to continue:



Note: Index Data. Represents MSCI World, S&P 500 and Cambridge Associates Buyout & Growth Equity horizon internal rates of return as of March 2018. Historical performance indications and financial market scenarios are no reliable indicators of current or future performance. Source: Cambridge Associates, Credit Suisse AG.

However, manager selection is much more important in private markets as the dispersion of returns can be as much as 16% between the first and fourth quartile manager, versus 2-3% in public markets. This is why our manager access, research and due-diligence process are so important, helping us to identify and form partnerships with highly coveted top-performing private managers.

Within a private market allocation, we believe strongly in diversification, designed to ensure we have the right mix of managers adding to portfolio value in different ways. Our approach is detailed below. We look to centre the portfolio with the largest allocation to core strategies and managers, with consistent ability to deliver top quartile returns. We then look to further enhance return through a smaller allocation to shorter-duration income strategies and higher-returning opportunistic strategies. Short-duration income strategies produce recyclable capital that can fund later-dated capital calls and reduce the so-called 'J curve' effect – where private market returns decline in the early years as managers invest, and then rise as monetisations occur. Opportunistic strategies provide upside optionality by focusing on higher-returning niche or thematic investments and may, depending upon opportunity, be shorter term in nature.

Alvarium Classification	INCOME STRATEGIES	CORE STRATEGIES	OPPORTUNISTIC STRATEGIES
Weight	10% - 20%	60% - 75%	10% - 20%
Portfolio Rationale	Current Return Capital Recycling Flatten J-Curve	Persistent Alpha Generators Coveted Managers Definable Investment Edge	Direct Investments Breakout Managers Thematic Strategies Impact Investing
Expected IRR	12% - 16%	16% - 20%	20%+
Investment Horizon	2 - 4 years	6-8 years	4-6 years

Additionally, we recommend vintage diversification, which means setting a client's long-term private markets allocation goal, but slowly investing over multiple years or vintages. This approach ensures clients maintain target exposures throughout the market cycle by regularly allocating capital in private markets as capital is returned. Vintage diversification also reduces the macro-economic risk of a poor vintage in one year.

Megatrends that could drive outsized returns looking forward

Trying to predict the future is always difficult, but we are beginning to see some megatrends that we think will grow in importance. Crucially, we recommend accessing these opportunities **in both public and private markets** and think an optimal mix of both, suited to a client's risk tolerance, is likely to produce the best forward-looking risk-adjusted returns.

Government bonds are challenged; real estate may be the new fixed income:

With interest rates likely to remain historically low for the foreseeable future, government bonds will fail to keep up with inflation. However, if inflation does pick up at some point and interest rates rise from here, investors could experience truly negative returns in government bonds for the first time in over 30 years.

As shown in the chart below, due to a phenomenon known as convexity, as rates rise, the change in a bond's price is not linear. Hence the loss from a position in bonds which have very low yields, such as government bonds today, is larger than if the starting yield were higher.

As seen in the chart below, a move from 0.5% to 2% on the 10-year yield across different bonds markets would cause a significant decline in price.

1 Year Total Return of 10 Year Government Bonds if Rates Rise						
Target Rate	**US**	**Germany**	**France**	**Switzerland**	**Japan**	**UK**
2.0%	-13.3%	-25.9%	-19.2%	-25.5%	-19.8%	-16.5%
1.5%	-8.4%	-20.4%	-14.2%	-20.4%	-14.8%	-11.6%
1.0%	-3.6%	-15.7%	-9.2%	-15.3%	-9.8%	-6.7%
0.5%	1.3%	-10.6%	-4.2%	-10.2%	-4.8%	-1.8%

Source: Strategas Research

There are a couple of ways to protect against such large price declines. In liquid markets:

- Using shorter-duration bonds, as they are less sensitive to changes in price.
- Investing in inflation-protected government bonds, as the price and return are in effect protected against a rise in interest rates caused by inflation.
- Investing in dynamic bond and credit funds that can allocate capital to the best credit opportunities and some who even by mandate can short the market (benefit from rising rates).

Private market debt funds, which access off-the-run or alternative credit market opportunities, can also be an alternative to traditional government debt.

We also favour investment in real estate for investors with longer-term horizons. Quality investment in real estate with strong tenant profiles in stable markets can provide a range of attractive features:

- A significant income advantage to bonds with yields in the 8-12% range on average, depending on opportunity.
- Many real estate properties have rents tied to inflation and thus act as a hedge against potential future rises in rates and inflation.
- Store of value; real estate is generally favoured given its tangible nature and long-term ability to both protect against inflation and appreciate over time.

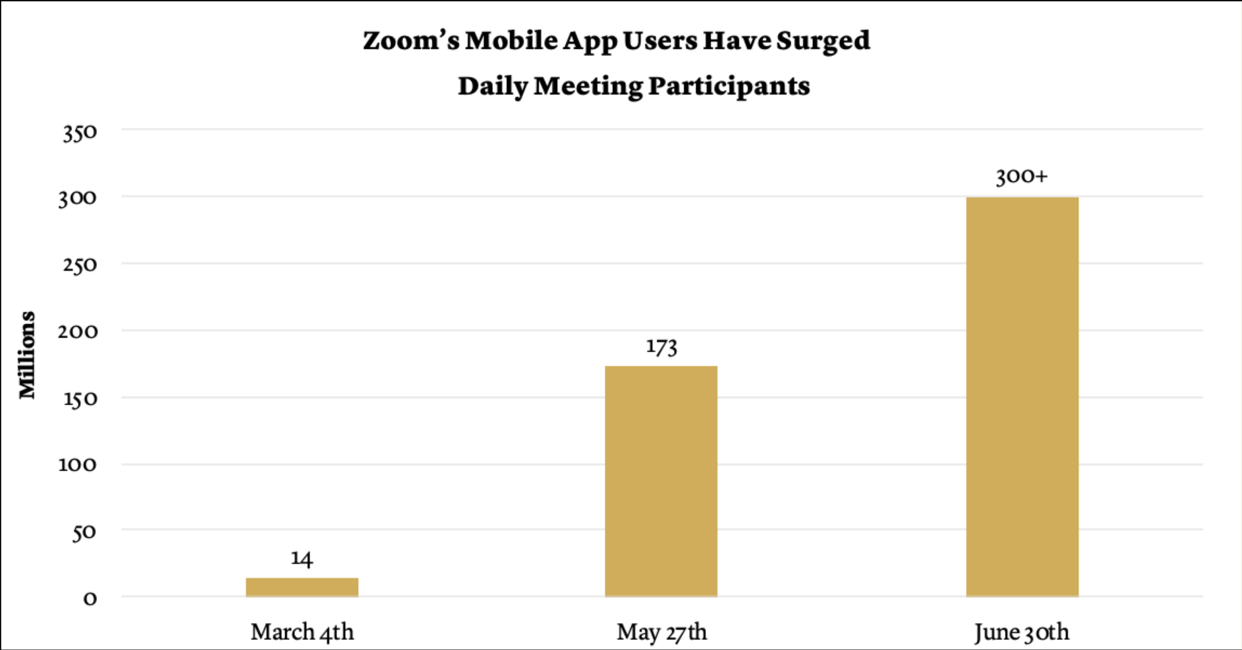
At Alvarium, we continue to source attractive direct real estate opportunities, investing side by side with our clients.

Digitalisation is here to stay

The pandemic has accelerated a tectonic shift toward digitisation and disruption. Hence, companies able to show resilience to, or unlock the potential of, digital disruptive change will be most highly valued.

We expect to see a plethora of opportunities, new business models and technological advancements in almost every sector. While many public companies might lead the charge in some of these areas, we think private markets could also be a rich arena in which to identify new opportunities, new technological trends and new business models. Private equity managers will transform more established businesses through the adoption of digital strategies, while venture managers will scour the globe for the leading digital corporate models.

Nowhere is the digital revolution more obvious than video conferencing interaction. With Zoom Video Communications, for instance, the number of daily meeting participants rose from 14 million in March to over 300 million by June. Other major connectivity platforms, from Microsoft Teams and Slack Technologies for messaging to Citrix Systems for remote computing, have also seen their usage increase substantially. Again, network effects remain central to these business models, suggesting such industries may similarly develop into oligopolies over time.



Source: Zoom & Alliance Bernstein

However, there remains a whole new industry to be discovered supporting this digital revolution. New businesses will emerge focusing on a raft of still unmet need: enhancing functionality, protecting privacy, embedding cyber resilience and using tools such as augmented reality and AI to vastly tailor customisation of the digital experience to consumer and enterprise need. In other words, we are at the earliest stage of this digital transformation.

Digital medicine is another good example. Telemedicine had been hampered by a combination of status quo bias, more challenging reimbursement and other country-specific licensing issues. But the pandemic has forced new behaviours as hospitals and other care givers have shifted services to telehealth to free capacity and limit the spread of the virus. This is already accelerating with new legislation in some major countries, notably China and Germany.

A study by leading healthcare market research firm Frost & Sullivan forecasts a sevenfold growth in telehealth by 2025 – a five-year compound annual growth rate of 38.2%.

Many new business opportunities will emerge. These include: an increased demand for AI and cloud-based platforms in the hospital industry; a rising demand for automation in medical technologies where disruption is often found at the intersection of digital and molecular research; a new-found acceptance of telemedicine solutions; improved patient data, storage and sourcing platforms in the digital health industry; adoption of AI in medical diagnostics and greater efficiencies in testing and production of vaccines, and perhaps even virtualisation in clinical trials, to name but a few.

The imminent move to 5G will allow these technologies to flourish; we expect enhanced speed and connectivity to commence a wave of more widespread adoption. The digital revolution will have ramifications for how we live and work, for a company's competitive advantages across a range of industries and for the value of assets ranging from data centres and e-commerce fulfilment to commercial office buildings. In addition, private managers bring strategic and operational skills and a range of business competencies and capital to usher businesses to greater scale.

We think having exposure to the most important of these trends in both public and private markets is the best way to maximise return and diversify risk.

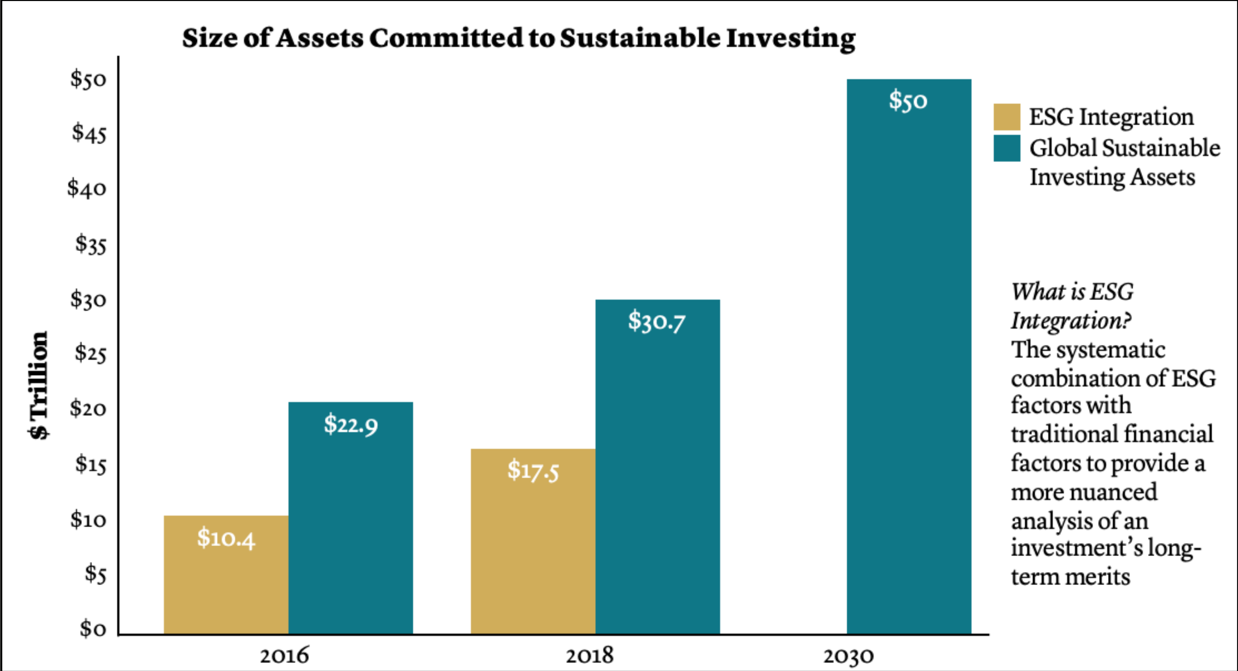
Sustainable investing is the new norm:

Sustainable investing is also likely to dominate looking forward. Never before have we seen such a confluence of government, investor and corporate focus. This heralds well for change.

We can already see signs that **western governments will look to wean support from income subsidy to green infrastructure spend.** As opposed to a one-time boost that comes from hand-

outs, infrastructure investment has the power to generate jobs and improve the long-term productivity of an economy. It is also likely to be part of the wider plan to support economic growth post-pandemic. President elect hopeful Joe Biden has set clean energy and green infrastructure as a cornerstone of his policies if elected in the US. Boris Johnson has promised £3bn in spending in a Marshall Plan-like programme where a green recovery is one of the UK government's clear priorities. The European Recovery Fund has also identified the green economy as critical to its future investment spend.

A focus on sustainability is also taking the corporate world by storm. Today, a focus on environmental, social and governance factors (ESG) is de rigueur both to companies and investment firms. Strategies that consider a company's sustainability grew to more than $30trn in 2018, and some estimates say it could reach $50trn over the next decade.



Source: Global Sustainable Investment Alliance

Moreover, more than 2,250 money managers who collectively oversee $80trn in assets have now signed on to the United Nations-backed Principles for Responsible Investment. Strategies, which include impact investing, are not new, but momentum is growing as shareholders demand action and as the consequences grow for companies that fail to adapt. Impact strategies aimed at addressing the 17 United Nation's Sustainable Global Goals are thus focused on a wide range of impact change initiatives from energy transition to healthcare and plant-based foods.

We believe that successful companies of the future will embrace sustainability. At the same time, those businesses that can't or won't proactively adapt may lag in performance or trade at lower valuations. Already since the onset of the pandemic, companies with higher ESG ratings

have outperformed the broader market. In part, these companies have stronger balance sheets and higher returns on cash flow. ESG and quality as factors have a high degree of correlation. But investors are also recognising the implications of a world focused on sustainable investing: many industries may have years of catch-up and depressing returns, either because of added costs to make them more responsible or significant levels of capital investment required.

Hence, we focus on managers who share our beliefs: that investment in companies with a combination of sustainable financial models, sustainable business practices and sustainable business models will drive excess returns. These will be the high-quality companies of the future and they will be found in both public and private markets. Indeed, with a strong emphasis on stewardship, and close contact between the GP and company management, private equity is naturally suited to responsible investment.

One thing we know for sure: no country, sector, company or asset class will go untouched.

In conclusion

Significant changes are afoot and many of these have been accelerated by the pandemic. Debts and deficits will be an overhang of the crisis; and an increase in taxation and inflation with a medium-term view cannot be ruled out.

However, a greater emphasis on fiscal policy to support important global 'green' priorities will remain a positive legacy of the crisis. The next few years may see a change in how people live, work and experience technology – and the digital revolution is here to stay.

Return expectations for the 60:40 stock/bond allocation model are likely to be lower as we look to the future. Hence, we encourage clients to embrace **both public and private markets** through top quartile active managers to **achieve returns similar to those which were generated over the past decade, with an increasing focus on megatrends such as digitalisation strategies and sustainable investing.**

Alvarium is an independent, global multi-family office offering tailored investment solutions for leading global families and foundation clients. We provide bespoke investment management and a powerful network for co-investment, collaboration and connection.

As well as acting as trusted advisors in the financial markets, we are able to offer proprietary direct co-investment opportunities, outside traditional asset classes, with specialisms in real assets and the innovation economy.

Alvarium has over 220 employees and 28 Partners, working across North America, Europe and Asia Pacific. We advise assets in excess of $18bn in value.

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