

Foreword

When last year's CREATE-Research report was launched, the world was in the early stages of getting to grips with the global pandemic. As this year's report comes out, there is light at the end of the tunnel. The vaccine roll-out is underway, and the hope is that the increasing levels of protection afforded will allow for some kind of return to normal.

In this context, the key theme of this year's report, the 'S' pillar of ESG (environmental, social and governance) investing, is highly pertinent. As politicians and policy makers across the world aim to 'build back better', we as an investment community need to take the time to fully understand the social part of ESG. We live in an age where the politics of inequality and 'social justice' cannot be seen as external to the investment process.

Here at DWS we are working to integrate the 'S' pillar into our investment processes but also to ensure we act responsibly as a corporate citizen. This can be seen in a number of donations we have made over the past year to mitigate the effects of Covid-19, including, for example, the funding we have given to the 'Global Health Research Accelerator' programme. Launched by the University of Oxford, this 10-year project brings together

frontline health professionals in Africa, Asia and Latin America to generate research results that aim to prevent epidemics and disease in the poorest countries.

Sponsorship of worthy social initiatives is one way companies can play their part in creating a better future, but it is not enough. The bigger challenge is working out how to weave the 'S' pillar into all business activities. This is difficult because the 'S' in ESG is less tangible than the 'E' and 'G', which makes it harder to define objectives. For our part, DWS has determined three social development goals that are material to our ESG strategy and corporate social responsibility efforts. These are: decent work and economic growth, reduced inequalities, and climate action. The first two clearly fall within the 'S' pillar category.

As the report highlights, the 'S' pillar is acquiring its own distinct identity, but only gradually. The rate at which the investment industry is embracing ESG suggests that distinct identity will emerge sooner rather than later.

This timely report will play a part in developing that distinct identity, while also highlighting the ever-growing importance of passive investment solutions for pension funds. I hope you find it as enlightening as I have.

Asoka Woehrmann

CEO, DWS

Acknowledgements

"The wise investor recognises that success is a process of continually seeking answers to new questions."

Sir John Templeton British investor

This is the fourth annual pension survey in a research programme first started by DWS and CREATE-Research in 2018 to highlight the forward parallel rise of passive funds and environmental, social and governance investing.

The 2021 survey shows how Covid-19 has exposed the long-concealed failings of today's market economies and raised questions about their ability to continue providing decent pensions to millions in the post-pandemic world.

Appropriately, it highlights the heightened interest in the social pillar of ESG on the part of pension investors.

My foremost thanks go to the 142 pension plans who participated in this survey. Many of them continue to provide unstinting support that has, over time, served to create an impartial research platform now widely used in all pension jurisdictions.

I would also like to especially thank DWS for sponsoring the publication of this report without influencing its findings in any way. Their armslength involvement has helped to canvas a wide spectrum of practices in the pension landscape and deliver the findings in an impartial manner.

My grateful thanks also go to IPE for helping to conduct the survey and especially to its editor Liam Kennedy for his wise counsel and constructive support throughout the project.

Last but not least, I would like to thank three immediate colleagues at CREATE-Research: Lisa Terrett for survey administration, Anna Godden for desk research and Dr Elizabeth Goodhew for editorial support.

If, after all the help I have received, there are errors and omissions, I am solely responsible.

Amin Rajan

Project Leader, CREATE-Research

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Executive summary

Introduction and aims

"We are gradually coming to the realisation that a more holistic understanding of fiduciary duty is critical to preserving capital over the long term. Issues such as climate change or social disruption caused by inequality pose long-term systemic risks that ultimately affect our fund performance, and these risks cannot be hedged away through traditional portfolio diversification."

Hiro Mizuno
Former CIO of the Government Pension Investment Fund of Japan

From the Plague of Justinian and the Black Death to the 1918 Spanish flu, history shows all too vividly how pandemics can expose and amplify the deep-seated inequalities that exist in societies. Covid-19 has made today's inequalities in key areas like human health, job security and racial discrimination impossible to ignore. They undermine the economic foundations of a sustainable society.

Worldwide, many young adults are now joining the workforce in an age of job scarcity, digital apartheid and mounting disillusionment. Many of them are experiencing their second major global crisis in a decade, affecting their education progress, job prospects and mental health.

Without adequate pathways to a better future, the social contract between the capitalist system and citizenry now faces its stiffest test in living memory. Long-neglected ills such as stagnant incomes, job insecurity, underfunded public health systems and environmental damage have become lightning rods for political backlash, as shown by the rise of populism on both sides of the Atlantic in the last decade.

Since March 2020, major central banks and governments have committed around USD 25 trillion in an attempt to avert large-scale economic devastation wreaked by the pandemic. Unusually, these new measures bypassed financial systems by channelling help directly to businesses and households in real time – such was the severity of the calamity. In the emotional climate of insecurity and precarity, governments have reframed the 'social contract' of corporate life with furlough

schemes, industry-wide bailouts and other fiscal support measures. Although necessary, these have tackled the symptoms, not the causes, of the underlying structural malaise.

Before then, the rise of populism had been a wake-up call on the manifest failings of the prevailing model of capitalism, which puts profit before people and finance before the real economy. Recognition of this came into sharp relief in August 2019, when Business Roundtable, a powerful US corporate lobbying group, made a historic U-turn.

It ditched its age-old declaration that "corporations exist to principally serve their shareholders" in favour of "we share a fundamental commitment to all our stakeholders – customers, employees, suppliers, communities, and shareholders". The world's top companies are now enjoined to increasingly demonstrate their societal purpose by overtly orienting their operations to benefit all stakeholders.

Around 200 signatories, including a 'Who's Who' of the American business establishment, thus binned the old orthodoxy of shareholder supremacy by embracing an all-inclusive purpose.

Since the worldwide adoption of the UN's Sustainable Development Goals in 2015, pension plans' interest in environmental, social and governance (ESG) investing has been rising – steadily, at first, and dramatically, latterly. The environmental and governance pillars spearheaded the first wave of growth, while the social pillar lagged behind due to its highly qualitative and normative nature.

Now, mandated lockdowns in the global economy have provided vivid confirmation of the old adage: sustainable economies need sustainable societies. With the rise of this stakeholder mindset, the spotlight has been turned on the financial materiality of social responsibility in all areas of corporate operations.

As the pandemic entered its second year, the ESG conversation has moved from risks and returns to a more fundamental question: what role do companies have in creating a fairer and more sustainable society, as today's capitalism faces its worst challenge in living memory?

As a result, our 2021 DWS–CREATE pension survey aims to shed light on how pension plans worldwide are reacting to this shift.

Our last two annual surveys highlighted the simultaneous foundational trends marking the rise of ESG investing and passive funds by respectively covering the 'G' and 'E' pillars. This year's survey marks a logical extension by focusing on the 'S' pillar.

It relates to how a company manages relationships with its five stakeholder groups that are most

material to its financial performance: shareholders, employees, suppliers, customers and the communities in which it operates.

The survey aims to address four issues:

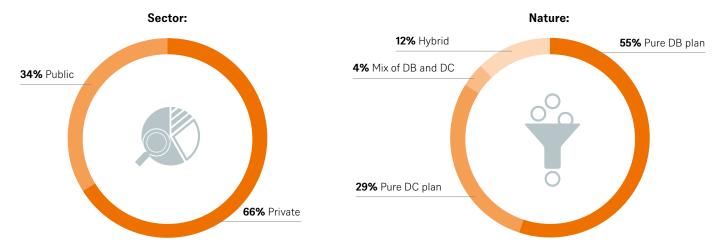
- adoption: what is the current state of adoption of socially related passive funds in pension plans' portfolios?
- coverage: which asset classes and vehicles are being used to access them?
- outcomes: how have they performed since the big market dislocation in March 2020?
- future growth: what are its prospects in the post-pandemic world?

The survey attracted responses from 142 pension plans in 17 jurisdictions with a collective AuM of €2.1 trillion. Forty of them were also involved in post-survey interviews to add the necessary depth, colour and nuance to our findings. Their demographic details are given in Figure 1.0.

The rest of this section presents the survey highlights and the four key findings that emerged when the survey data were combined with interview insights.

FIGURE 1.0
Which sector does your pension plan cover, and what is the nature of your plan?

% of respondents



Survey highlights (% of respondents)

PASSIVE FUNDS CENTRED ON THE 'S' PILLAR ARE AT THE NASCENT STAGE OF THEIR LIFE CYCLE

33% (

Are now in either the 'mature' or 'implementation' phase of their life-cycle



Are at the 'close to decision making' phase



Now have these funds accounting for more than 5% of their total passive portfolio



Report data challenges as a major constraint on their current allocations

THE 'S' PILLAR IS ACQUIRING A DISTINCT IDENTITY - GRADUALLY



Use core socialrelated indices currently, rising to 26% over the next three years

Use broader FSG indices due to a dearth of core social-related indices currently, rising to 49% over the next 3 years

66%



Regard employees as financially the most material component of the 'S' pillar



Cite Covid-19 as a key driver of their heightened interest in the 'S' pillar because of its growing materiality

THE 'S' PILLAR TARGETS A DOUBLE BOTTOM LINE

58_% S



Seek to do well financially and do good socially from their allocations to the 'S' pillar



Seek to manage hard to model fattail/far-off risks by investing in the 'S' pillar



Report that their 'S' pillar passive funds outperformed the wider markets in the March 2020 crash



Think that it's too soon to judge the performance of their 'S' pillar funds so far

THE 'S' PILLAR IS NOW SET TO ATTRACT FRESH NET INFLOWS

66% So



Expect to increase their allocations to 'S' pillar passive funds over the next 3 years



Will target a tracking error of below 1% for their 'S' pillar passive funds



Expect to use equities as their favourite underlying asset class of choice over the next 3 years, rising from 53% currently

67_%



Will select their index managers on the basis of their track record on the delivery of their clients' social agenda

Key findings

1. The pandemic has brought social risk to the forefront by exposing the stark failings of market economies

That the pandemic has hastened the tectonic shift towards ESG investing is not in doubt; nor that it has sparked interest in the 'S' pillar, which is starting to translate into allocations in pension portfolios (Figure 1.1).

Whereas 65% of our respondents already have a 'mature' portfolio of passive funds in general, the corresponding figure for passive funds specifically targeting the 'S' pillar is 11%. Those currently in the 'implementation' phase is 22%.

Thus, funds related to the social pillar are advancing into the pension portfolios of around one in every three respondents to our survey. That leaves the remaining two-thirds either at the 'close

to decision making' or 'awareness raising' phase in the current life-cycle.

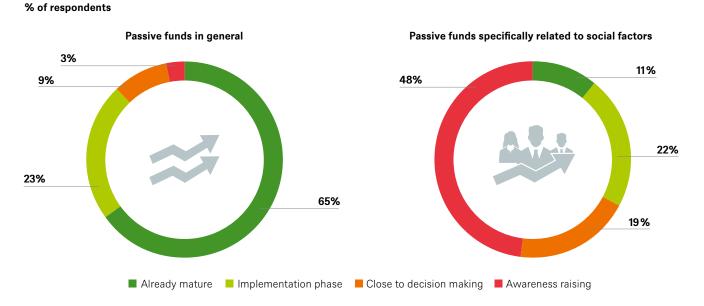
The implication is that there remains considerable potential for growth before passive funds based on the 'S' pillar reach the maturity phase.

That much is also evident when their current share in total pension portfolio is taken into account (Figure 1.2).

Whereas 33% of respondents do not currently have any allocation to the 'S' pillar in their total portfolio, the corresponding figure for allocation to the social-related passive portfolio is 67%.

At the other extreme, 31% have an allocation of above 15% in their total investment portfolio. The corresponding figure for social-related passive funds is 7%.

FIGURE 1.1 In which stage is your pension plan currently with respect to the following types of investment portfolios?



"The 'gig economy' is an example of how insecure cheap labour is branded to bestow a cloak of legitimacy to unviable business models."

An interview quote

a) The barriers

Many factors have conspired against growth in the recent past, as listed in Figure 2.1 in Section 2, and cited below.

It shows that 58% of our respondents find that their time horizons are not long enough to realise the investment benefits of the social pillar, because of the immediate funding challenges caused by the pandemic.

51% cite the lack of consistent definitions, standardised methodology and reliable data on the 'S' pillar due to its qualitative and normative nature, which works against meaningful KPIs as well as universal singular 'social' benchmarks. Even when a relevant social factor has been selected, its impact can be hard to measure. Defining

whether a stream of revenue provides a social benefit remains a challenge. This is because the overwhelming majority of indicators of the 'S' pillar currently measure company policies and procedures, not their real-world outcomes.

Besides, 51% of our respondents believe that there is strong interdependency between the three pillars of ESG. Hitherto, good governance has been widely accepted as the basis of strong environmental and social standards that show how a company's vision and business practices are aligned to delivering the sustainability goals on the ground.

However, Covid-19 has shown that ESG risks, long considered fat tailed and far off, are becoming more apparent, more frequent and more immediate (Case Study 1a).

Case study 1a: The 'S' pillar is coming of age

Ageing demographics have forced us into negative cash flow status, exposing us to the sequence of returns risk: the time taken for our portfolio to recover after a big drawdown. For ESG investing, therefore, we divide the risks associated with our investee companies into two types: event risks and erosion risks.

The first is driven by short-term events – like governance lapses, labour disputes, tax frauds – that can have an immediate effect on stock prices. A recent example includes the precipitous implosion of Wirecard in Germany, once the fraud was uncovered.

The erosion risks, in contrast, can decrease market value over a period of time, as they unfold gradually and continuously. Climate change is a good example.

Social factors, in turn, are exposed to both types of risk. Poor labour relations can harm short-term profitability via industrial disputes and long-term competitiveness via low productivity.

So far, we have tended to put more emphasis on the governance part of ESG, backed by shareholder engagement. For us, governance forms the basis of strong environmental and social standards that are indicative of the day-to-day operations of a business and how it interacts with wider society.

However, Covid-19 has forced a rethink on the event risks inherent in the social factor. The presence of the so-called gig economy shows how fanciful labels have served to conceal deep sources of structural instability and insecurity in our society. Reliance on governance alone is no longer enough. Our ESG investing is becoming more granular as its inherent investment risks are becoming more apparent, more immediate and more consequential.

A Dutch pension plan

"Return expectations of the social pillar are the same as for other forms of investing."

An interview quote

b) The drivers

In hindsight, the pandemic may prove to be a watershed moment for the 'S' pillar, as shown by Figure 2.2 in Section 2.

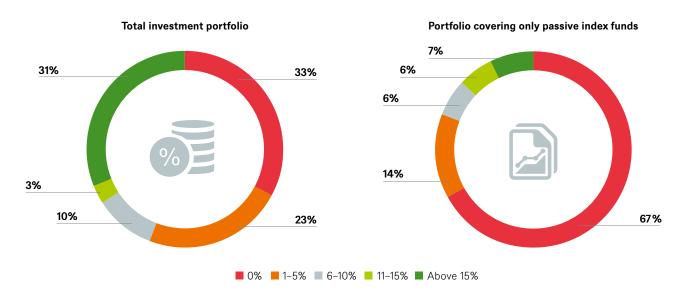
It shows that 59% of our respondents cite the need to tackle the inequalities exposed by the pandemic as a key factor driving their allocations to the 'S' pillar. Widening societal divisions have strained already weak safety nets and economic structures beyond capacity.

Such divisions had been building up over the past 40 years as the rise of turbo-charged globalisation and digitalisation created winners and losers, mainly in the West. Governments struggled to re-equip and reskill those who suffered job losses and stagnant incomes, as the centre of gravity in global manufacturing migrated to the low-cost emerging economies.

The transition has not been just, however. Both globalisation and digitalisation delivered benefits in the West. But these have accrued to many in their role as consumers, not as workers or citizens. So, fresh emphasis on the 'S' pillar reflects both the need to have a just transition as the global economy advances towards a low carbon future and the desire to address the prevailing inequalities that have built up over time and undermined economic stability.

This imperative is underscored by the fact that 48% of our respondents recognise the growing materiality of social issues in business performance and investment outcomes and 58% are seeking good long-term risk-adjusted returns by investing in them. This focus on the long-term is deliberate because their liabilities stretch over the next 40 years.

FIGURE 1.2
What is the approximate share of all social-related funds in your pension plan's two investment portfolios currently?



"Stakeholderism may smack of socialism, but ignoring it could be bad for shareholders in the age of rampant inequalities."

An interview quote

Finally, for their part, governments and regulators in various pension jurisdictions are now keen to ensure that the fiduciary role of pension plans embraces the sustainability agenda. Covid-19 has profoundly and painfully impacted society and shaken our assumptions about the way we live. The gig economy – offering no employee benefits such as paid sick leave, healthcare and retirement benefits – is an example of how socially undesirable job practices have acquired a cloak of legitimacy and undermined the long-held social contract.

Hence, 49% of our respondents see this policy intervention as an influence on their allocations to the 'S' pillar. Many among them harbour doubts about the emerging stakeholder model and equate it to creeping socialism – with an overweening state flexing its muscles in different areas of business conduct. But currently they have little choice other than to go with the flow. It seems the only viable option for making today's capitalism work for all, rather than a select few.

2. The 'S' pillar is gradually acquiring a distinct identity

In light of the identified barriers, the recent evolution of the social pillar in passive funds has remained narrow in its construct in four respects.

a) The 'S' pillar trails well behind the other ESG pillars

As Figure 1.3 (left chart) shows, hitherto, our respondents have been focused on the 'E' pillar (58%) followed by the 'G' pillar (31%), with the 'S' pillar trailing behind (11%).

They have historically prioritised environmental factors, so issuers have developed systems and reporting frameworks on issues such as carbon emissions, fossil fuel reserves and the use of clean energy. On the other hand, few companies have the necessary data-reporting frameworks on social issues.

To compound the problem, existing regulations diverge by region. They use differing standards for voluntary ESG disclosures – from the Sustainability Accounting Standards Board to the Global Reporting Initiative, the Carbon Disclosure Project, and the UN Global Compact – all with different needs and principles around the understanding of what the standards should be.

Above all, the qualitative aspects of the social pillar – like health, welfare and education – are seen as generating positive externalities that are observable, not measurable. As such, they are 'public goods' that come under the realm of government responsibility, not capital markets; according to 49% of our respondents (Figure 2.1 in Section 2).

b) The 'S' pillar is being accessed via broad ESG indices

The use of core–thematic social-related funds is currently confined to only 14%. This number is likely to nearly double over the next three years (Figure 1.3, right chart).

Similarly, the reliance on social bond indices is small (6%) but is set to rise to 28% over the next three years. It provides an effective mechanism for financing social projects, while providing the best platform to engage with issuers to increase their activities in socially impactful products and services.

Thus, the use of selective targeted indices in both these areas is somewhat limited currently due to a dearth of indices. But it is set to rise appreciably over the next three years. Currently, for every ten thematic sustainability indices in the marketplace, only two cover the 'S' pillar, forcing investors to make do with what is available.

Currently, 46% of respondents use broader ESG indices to achieve their social goals. This number is likely to rise to 49%. The two key contributory factors are the interdependency between the

"The pandemic storm hit us all, but it showed that some of us were in stronger boats than others."

An interview quote

'E', 'S' and 'G' pillars and the lack of clear social benchmarks, as mentioned earlier.

That the broader indices will continue to retain their importance is further shown by the use of Sustainable Development Goals-related indices. Currently, 29% rely on them and this reliance is likely to rise to 52% over the next three years. The sheer breadth of issues covered by the 'S' pillar is one factor. Another one is the growing attention that the SDGs are now receiving from policy makers in the key economies, as the impact of climate change on human health is becoming graphically visible via the rise of infectious diseases and large-scale human migration.

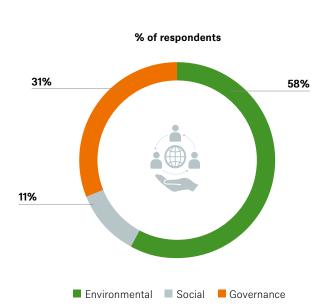
c) The 'S' pillar has relied mostly on equities

As with indices, so with asset classes, coverage of the 'S' pillar is skewed towards equities and, to a much lesser extent, bonds. Currently, 53% of our respondents rely on equity-based passive funds to invest in the 'S' pillar. This figure is likely to rise to 62% over the next three years (Figure 2.3 in Section 2). The corresponding figures for fixed income are 28% and 50%, respectively.

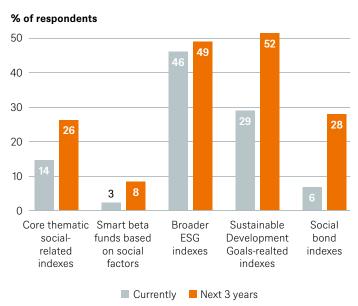
The implied concentration is dictated by a number of factors.

To start with, equities have attracted a higher share of ESG indices than other asset classes. In contrast, because of its overly quantitative nature, the range of fixed income indices that explicitly target social ends is limited – for now. Furthermore, the booming equity markets of the last decade have delivered investors' return expectations, while zero-bound rates have turned fixed income into more of a capital conservation tool. Finally, equities are more amenable to stewardship activities like direct engagement

FIGURE 1.3 When considering ESG investment currently, which component do you consider to be the single most important one?



What are the main vehicles used to invest in social-related passive funds currently and which ones will be used over the next three years?



"The pandemic has profoundly shaken our assumptions about the way we live and exposed the financial materiality of social issues."

An interview quote

and proxy voting at AGM. Our respondents highlighted the difficulty of holding year-round conversations with bond issuers.

Notably, however, there is now an evolution in progress from 'green' bonds to 'sustainable' bonds and on to 'sustainability-linked' bonds. The latter make coupon adjustments, if the issuer does not meet the predefined sustainability targets by a specified date. Although they carry low coupon, they are expected to benefit from price action, as and when they are included in the bond-buying programmes of central banks.

d) The 'S' pillar's financial materiality is confined to immediate stakeholders

The Covid-19 crisis has concentrated minds on the 'S' pillar in general and two stakeholder groups

in particular. Both are now being recognised as financially material to investment returns (Figure 1.4, left chart).

These stakeholders are employees (cited by 66% of the respondents) and the local community (41%). The other two stakeholders – suppliers and shareholders – are deemed material by many fewer respondents (31% and 28%, respectively).

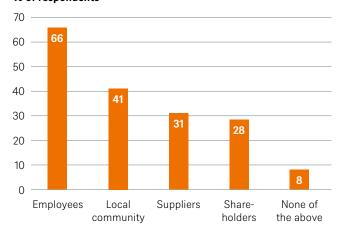
Two parallel events underpin this assessment, as discussed in Case Study 1b. The first is the stark inequality and unfairness at the workplace as revealed by the lockdowns forced by Covid-19. These can no longer be ignored by shareholders.

The low-paid, insecure, service occupations were not only expected to continue to work after being classified as 'key frontline' workers

FIGURE 1.4

Which of the four key clusters covered by the social factor do you regard as a financially material to investment returns?

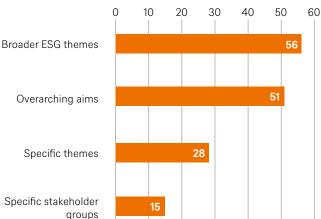
% of respondents



Source: CREATE-Research Survey 2021

What is/will be your preferred target when investing in social factors?

% of respondents



"How companies treat their employees is now a key proxy on how they can respond to other shocks."

An interview quote

Case study 1b: The tumultuous events of 2020 were a wake-up call for capital markets

Along with other asset owners, we have filed a shareholder proposal to the board of Amazon, calling for an independent audit of the company's policies and practices on issues such as civil rights, diversity and inclusion, and we demand to know what risks they pose to its business.

The events of 2020, especially the death of George Floyd, Ahmaud Arbery and and other people of colour, have blown open the ongoing struggle around racial equality, sparking worldwide demonstrations and galvanizing the movement for racial justice. The proposal cites a big gap between the rhetoric of company employment policies and the daily reality.

Black Lives Matter considerations are increasingly material to us as shareholders. For example, in June 2020, Facebook dropped about USD 60 billion in market value over a two-day period. This happened as prominent brands, such as Coca-Cola and Starbucks, pulled ads from the social media giant in protest against the spread of hateful content on the platform.

Similarly, institutional shareholders forced the resignation of Rio Tinto's CEO and his top colleagues for authorising the blasting of caves at an ancient heritage site that belonged to Aboriginal landowners. This was seen as a blatant case of destruction of cultural heritage and violation of human rights.

The increased prominence of racial injustice has propelled our investee companies to do a root and branch reform of their workplace ESG standards. Many of them are now involved in a new initiative called the Human Capital project. It is led by the Sustainability Accounting Standards Board (SASB), a global body supported by 170 institutional investors holding roughly USD 55 trillion in assets.

It's hard to believe that capital markets will ignore social issues after all that happened in 2020.

A US pension plan

and were therefore the people most exposed to the virus, their vulnerabilities were amplified by their underlying health issues – like poor diet, overcrowded living conditions and inadequate healthcare.

The second event was the worldwide Black Lives Matter protests in the wake of the death of George Floyd in the US at the height of the pandemic. Like the famous civil rights marches led by Dr Martin Luther King Jr in the 1960s, they exposed widespread institutional racism embedded in many societies that have continued to overtly marginalise and disadvantage racial minorities from mainstream society in many countries. Covid-19 has exposed injustices

around work that are now material to the financial worth of a company.

These two events focused on areas where investors and their investee companies can make an immediate difference in deference to enlightened self-interest: namely, employees and the local community.

However, until the current range of more customised indices is expanded notably, our respondents will continue to rely on the ones that target broader ESG themes (56%) and overarching aims set by the Sustainable Development Goals (51%), as shown in Figure 1.4, right chart.

"Respect for human rights is closely linked with value chain resilience and business stability."

An interview quote

3. The 'S' pillar is about doing well financially and doing good socially

Our respondents' sustainability journey so far has broadly followed the path first developed by The Impact Management Project. It shows how, within an investment portfolio, the relative weights of investors' financial and societal goals change with the three newly emerging forms of investing:

- Exclusionary screening: avoiding companies engaged in activities deemed unethical, such as tobacco, lethal weapons, pornography, child labour, abuse of human rights and environmental degradation.
- Best in class ESG: overweighting companies with high and/or rising environmental, social and governance scores and avoiding those with low scores in the belief that success is as much about avoiding losers as picking winners.
- Impact investing: seeking measurable outcomes from targeted social and environmental projects that support specific SDGs via a more imaginative deployment of financial capital.

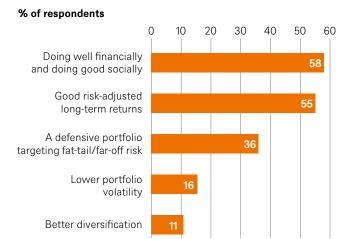
The relative weight of societal goals is meant to increase as investors transition to impact investing, which is essentially about targeting measurable financial and societal outcomes. Collectively, they are seen as one of the key solutions to internalising various negative externalities caused by companies that impose uncompensated costs on wider society while retaining all the financial benefits.

So far, the indices used by our respondents in targeting the 'S' pillar have relied mostly on exclusionary screening and best-in-class ESG to achieve three goals: doing well financially as well as socially (58%), seeking risk-adjusted long-term returns (55%), and building a defensive portfolio against fat-tail/far-off risks (36%), as shown in Figure 1.5, left chart.

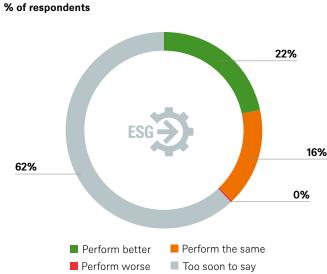
The focus on a double bottom-line is based on the belief that government support for companies during this pandemic has come with strings attached. These may well expand the scope of public interventions in both financial markets and corporate policies in areas such as share buybacks,

FIGURE 1.5

What benefits do you expect your asset manager to deliver when deciding to invest in socialrelated passive funds?



Which of the following statements applies to your investment in social-related passive funds either singly or as part of broader ESG indices since the big market dislocation in March 2020?



"It is time now to dump the term 'non-financial' from the corporate lexicon and treat ESG issues with the same rigour, diligence and auditing as 'financial' reporting."

An interview quote

business governance and employee relations. On past form, mission creep will be inevitable. Employer policies on human rights will come under increased scrutiny (Case Study 1c).

Similarly, the focus on long-term returns is dictated by two considerations.

First, as we saw in Case Study 1a, some social indicators are long term in nature and exposed to event risk as well as erosion risk, which remain elusive to today's generation of risk models, based on past price behaviours. Above all, the 'S' pillar is about pricing the future into the present.

Second, as a structural shift, passive funds are increasingly venturing into core buy-and-hold pension portfolios with rising holding periods. However, their pro-cyclical nature exposes passives to momentum risks and they therefore require longer periods for mean reversion to kick in after a big market drawdown.

Notably, though, the 'S' pillar performed much better during the market meltdown in March 2020 (Figure 1.5, right chart), showing that ESG investing is not just a bull market luxury. It proved far more resilient than its naysayers predicted. 22% of respondents reported that passive funds based on the 'S' pillar performed 'better' than the rest of the portfolio during the market crash in March 2020; 16% reported that they did the 'same' as the rest; and 62% reported that it was 'too soon to say'. None reported that they performed 'worse' than the rest of the portfolio. Indeed, by the end of 2020, total assets in sustainable funds hit a record of almost USD 1.7 trillion, up 50% over the year.

The implied resilience has intensified demand for improved ESG reporting, which has traditionally been referred to as 'non-financial', creating the perception that such information is not financially material. This misnomer fails to reflect the considerable value investors place on ESG as a credible investment tool that manages risks and delivers returns.

Case study 1c: Human rights will come to the fore in the post-pandemic world

The UN-backed Principles of Responsible Investment have now adopted a more muscular approach by enjoining its more than 3000 signatory asset owners and asset managers – with over USD 100 trillion of AuM – to ensure that their investee companies identify and remedy human rights abuses in their businesses.

The PRI advocates that employees must have the right to be treated with dignity and fairness, as defined by the International Bill of Human Rights. This includes the right to health, to an adequate living standard, to freedom of expression, to privacy, to a living wage and to form a union, among others. To convert aspiration into action, the PRI enjoins its members to have a clear policy around human rights, integrating it into their governance and strategy and embedding it in due diligence as well as shareholder activism processes.

As a signatory, we are implementing this guidance. Our index managers are now expected to deploy two stewardship levers: engagement – or direct dialogue – that demands to see progress on the ground; and tabling motions at the AGM that force senior executives to be publicly accountable for their actions.

Companies are especially prey to reputational risk when wrongdoing is detected and publicised by the 'Twitter fire hose' and other social media. These are increasingly influential in highlighting good and bad examples of company behaviours. Their narratives alongside other alternative data sources add further information to enable our assessments on the 'softer' aspects of corporate conduct.

A Swedish pension plan

"Companies are becoming aware that they need a social licence to operate."

An interview quote

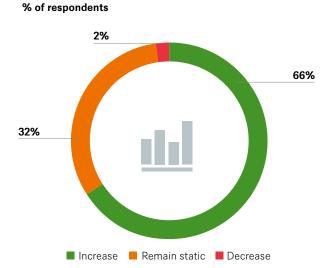
The EU's review of the Non-Financial Reporting Directive is a major step towards consolidating progress made so far and taking ESG reporting to the next level of progress.

4. The 'S' pillar is now set to attract fresh net inflows

During the market crash of March 2020, 82% of ESG indices have seen less drawdown during periods of extreme stress than their respective non-ESG parent indices; and 81% of ESG indices have outperformed their non-ESG indices since the March sell-off in 2020, according to DWS estimates*. Their resilience has continued to attract fresh net inflows. So, when asked how the share of social-related passive funds in their total portfolio is likely to change over the next three years, 66% of our respondents expect it to 'increase', 32% expect it to 'remain static' and 2% expect it to 'decrease' (Figure 1.6, left chart).

FIGURE 1.6 How is this share of social-related passive

funds likely to change over the next 3 years?



Source: CREATE-Research Survey 2021

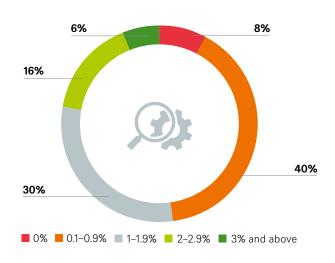
Before the crisis, new inflows were seen by many as merely a momentum trade in a 10-year raging bull market. It was believed that the viability of the three ESG pillars will be best judged not by the inflows when markets are rising, but by their resilience when the inevitable correction comes.

Now that ESG investing has passed the acid test, attention has turned to whether ESG pillars are risk factors akin to traditional ones such as value. quality, size and low variance. Two schools of thought were evident among our respondents: believers and pragmatists.

Based mostly in Europe, believers contend that markets in their region are gradually pricing in ESG risks selectively, putting more emphasis on the 'E' and 'G' pillars than on the 'S'. Consumers and governments have become stronger supporters of sustainability ever since the adoption of the 2015 Paris Agreement. Large European countries such as France, Germany, Italy and the UK have also

What is the extent of the tracking error that your pension plan is willing to accept in your socialrelated passive funds?





^{*}Past performance, actual or simulated, is not a reliable indicator of future results.

"The neglected middle child of E, S, and G is now coming into its own, in a new incarnation as a 'stakeholder'."

An interview quote

made the most progress towards implementing carbon pricing, according to the OECD data. The EU's directives on non-financial reporting and the taxonomy on climate change are reshaping the ecosystem of markets and orienting them towards risks with no historical precedent.

The pragmatists, on the other hand, argue that for ESG to be a risk factor it needs a long history across regions, asset classes and time. In the meantime, the impacts of major wildfires, flooding and droughts are becoming evident with greater intensity and frequency. The same applies to governance lapses and corporate wrongdoing. As if that were not enough, Covid-19 has blown the lid off socioeconomic inequalities. Hence, the pragmatists are treating ESG investing as a way of harnessing the informational inefficiencies while markets are slow to price in their inherent risks (Case Study 1d).

The immediate question for both schools of

thought is how much tracking error they are prepared to tolerate when investing in the 'S' pillar via passive funds. It measures the level of active risk each fund takes versus its parent index. By its very nature, there is a trade-off between high exposure to the 'S' pillar and low tracking error. And therein lies the paradox uncovered by our 2020 survey report, *Addressing climate change in investment portfolios*.

On the one hand, our respondents expect good long-term risk-adjusted returns from their passive funds covering the 'S' pillar (Figure 1.5, left chart). Yet, they are not willing to tolerate big deviations from the parent index that is used as a benchmark (Figure 1.6, right chart). 40% of them would prefer their tracking error to be below 1%. At the top end, only 22% are willing to tolerate an error in excess of 2% that comes with a more concentrated portfolio.

The paradox is explained by the nascent nature

Case study 1d: Is ESG a risk factor or a momentum trade?

The headlong increase in ESG investing in the past three years has given rise to debate on whether it is simply a momentum trade with a good bandwagon premium or a risk factor – on top of the traditional ones like value, quality, low variance and size.

To qualify as a risk factor, ESG needs to have a common definition across time, space, style and region. This has yet to happen. In addition, most risk factors are not readily observable, obliging our asset managers to use their investible proxies. For example, the value factor is proxied by quantifiable measures like book-to-price or p/e ratios. As yet, there are no widely accepted proxy metrics for ESG, nor a consensus on what weights to accord to each of its components. Thus, we are left to make judgement calls.

Clearly, analysing a company's past financial numbers is akin to driving using only the rear-view mirror. The past is a poor guide to the future when there is so much change around us. So, we look forward and factor in that change. Capital markets are taking note, as ever more institutional investors are throwing their weight behind sustainable investments. In the post-pandemic world, conventional probabilistic risk models – based on historic price behaviours – are likely to be more therapy than anything useful.

So far, the returns on our ESG portfolio based on passive funds has exceeded our expectations since 2015. It also proved more defensive in the turbulent markets of 2020. It delivered more by losing less.

A French pension plan

"There is a trade-off between societal impact and tracking error."

An interview quote

of the 'S' pillar currently. Our respondents expect to see some demonstrable benefits, without sacrificing baseline outcomes. Thus, they are looking for a free option that gives an upside as markets start to price in the 'S' pillar and downside protection if they don't.

However, as the infrastructure of skills, data and technology improves, pension plans may well tolerate a higher tracking error in order to accelerate positive social change in areas that are materially important for investment returns.

As the performance track record builds up, the demand for more customised indices will accelerate.

In conclusion, the cultural and legal norms around

the 'S' pillar will most likely become so ingrained that they will, over time, become a standard part of good business practice, rather than being a specific collection of metrics tracked by investors.

Hence, there is every expectation that the 'S' pillar will outlast the crisis that catapulted it to prominence and become a permanent feature of passive investing.

With Covid-19, some tipping points are not hard to spot in real time. This is one of them, according to the majority of our respondents.

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The rise of the 'S' pillar

What are the key blockers and drivers?

So far, the advance of passive funds covering the 'S' pillar in pension portfolios has been modest because of mismatches in time horizons, the interdependency between the E, S and G pillars and the shortcomings of the available investible information.

Yet, the winds of change are evident. The inequalities exposed by the pandemic have heightened awareness that sustainable pensions require sustainable societies. The materiality of the 'S' pillar has been further bolstered by the increased regulatory tempo.

So far, equities have been the key vehicle for investing in the 'S' pillar via passive funds. Fixed income will soon follow as more index funds incorporate social and community development bonds. Private market assets, too, will see an advance, albeit from a very low base.

Manager selection for passive funds covering the 'S' pillar is now largely driven by three criteria: business culture, as evidenced by a good track record on social agenda, stewardship capabilities, and a meritocratic fee structure.

Future growth in passive funds will be broad based. But it will be mainly spearheaded by ESG funds, other theme funds and ETFs. However, there is only so much that capital markets can do. Today's societal problems are so deep-seated that only governments can take the lead.

1. Key blockers

The ESG pillars have emerged as material to pension portfolios, especially in the wake of two seminal events in 2015: the worldwide adoption of the UN's Sustainable Development Goals and the Paris Agreement on climate change. Until very recently, the environmental and governance pillars have attracted the most attention. Three sets of constraints have conspired against the rise of the 'S' pillar (Figure 2.1).

a) Mismatches in time horizons

58% of our respondents cite that their time horizons are not long enough to realise the investment benefits of this pillar. Their current funding issues favour shorter horizons.

For example, in Europe, 66% of plans are already in negative cash flow status as ever more members are retiring each year. Of those still in positive status, around 53% expect to go negative in the next 5 years and around 81% expect to go negative within 10 years. Ageing demographics is forcing around 90% of respondents to de-risk their portfolios via liability-driven investing, even though nearly 65% of them are still underfunded. They cannot afford to withstand losses that require longer recovery periods. The situation in North America and Japan is not too dissimilar.

As a result, pension plans are obliged to draw a distinction between 'event' risks, which are idiosyncratic in nature with an immediate effect on a company's share price, and 'erosion' risks, which are systemic and materialise gradually

"Few companies have the required frameworks to report on data relating to social issues."

An interview quote

over a longer period (see Case Study 1a in the *Executive Summary*).

Governance risks fall into the former category, as exemplified by the recent collapse of Wirecard. In contrast, environmental risks sit in the erosion risk category, as exemplified by the recent wildfires in America and Australia, attracting extensive media attention worldwide. Social risks sit in the middle.

In general, financial markets tend to be focused on events that immediately affect company valuations, thus favouring the G pillar more than the E and S pillars. Those pension plans now in the decumulation phase with negative cash flow status tend to pay more attention to a company's share price in the short term. The rest who are concerned about far-off/fat-tail risks prefer to invest in the 'E' and 'S' pillars.

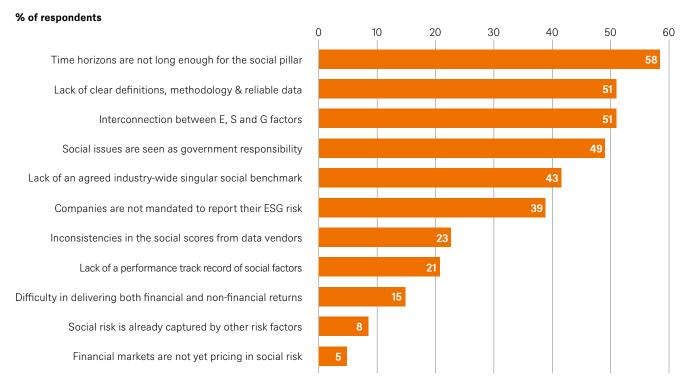
Yet, both groups harbour a common belief. The qualitative aspects of the social pillar – like health, welfare and education – are seen as generating positive externalities that are observable, not measurable. As such, they are 'public goods' that come under the realm of government responsibility, not capital markets, according to 49% of our respondents.

b) Interconnections between E, S and G

As Figure 2.1 shows, 51% of our respondents believe that there are strong interconnections between these three pillars of sustainability.

Good governance is widely accepted as the basis of strong environmental and social standards that show how a company's vision and business practices are aligned to delivering sustainability goals on the ground.

FIGURE 2.1
What are the factors currently constraining your pension plans from investing in social-related funds?



"The old adage 'you can't manage what you don't measure' aptly captures a key feature of today's ESG investing."

An interview quote

Today, the best practice governance model in the West envisages corporate attributes that are most conducive to the sustainability agenda. These include: a competent and experienced board of directors, capable of giving clear strategic direction to the full-time executives, whose compensation is linked to long-term sustainable value creation and who are accountable to all stakeholders with whom they have a regular strategic dialogue on ESG and other matters pertinent to stakeholder interests. So, the synergistic link between governance and other ESG pillars is clear.

But the matter gets complicated when environment and social factors are considered in isolation. This is exemplified by the dilemmas around the current large reserves of fossil fuels. As the global economy transitions towards a low-carbon future, these could be abandoned as stranded assets, well ahead of their economic life, causing undue social hardships in their local communities. Thus, there is a complex trade-off

between 'E' and 'S' as demand for fossil fuel drops. Clearly, the notion of 'social licence' to operate is fine in principle but not in practice.

c) Data shortcomings

Index providers have made progress in devising indices that combine and benchmark various environmental, social and governance components. However, the proliferation of specific ESG indices has been dominated by environmental issues, with far fewer indices specifically targeting social issues. Worse still, there is no industry-wide, singular 'social' benchmark that most investors would agree on (as cited by 43% of our respondents). Data problems remain formidable (Case Study 2a).

The qualitative nature of many social programmes makes it difficult to translate them into meaningful KPIs that investors can use effectively. Compounding this problem is the lack of consistent definitions,

Case study 2a: Data remain the Achilles heel of social investing

While data vendors are grappling with the 'E' and 'G' factors in ESG in response to rising user demand, the 'S' factor has remained elusive. There is a lack of consensus on what it covers simply because of the sheer variety of qualitative factors that come under the 'S' umbrella. However, all agree that it sits at the intersection point between 'E' and 'G'.

The crux of the matter is that there is no universal agreement on what constitutes a socially 'good' company in practice. Hence, governments worldwide mostly do not mandate companies to provide data on their ESG practices within a consistent framework.

As a result, data collecting and reporting by companies is largely self-directed and often self-serving. Companies may choose inappropriate outcome indicators, or they may choose the right indicators but use calculation techniques or ambitious assumptions that exaggerate

outcomes. Many appear to cherry-pick a 'base scenario' that serves to overstate the scale of ESG action by corporates and their final outcomes.

We are thus forced to use an array of definitions used by 150 different data compilers, whose proprietary scoring methods often yield a radically varied assessment of the same company. The result is greenwashing: short-cuts taken by some asset managers to repurpose their old funds with an ESG label, without rejigging the investment process.

The only solution is to access data from a variety of sources and enrich them by direct engagement with their investee companies so as to separate fact from fiction. That's what we do.

A Danish pension plan

"Social media is now increasingly influential in exposing good and bad corporate behaviours."

An interview quote

standardised methodology and reliable data on the social pillar (cited by 51% in Figure 2.1). Investors have historically prioritised environmental factors, so issuers have developed systems and reporting frameworks on issues such as carbon emissions, fossil fuel reserves and the use of clean energy. On the other hand, few companies have the necessary data-reporting frameworks on social issues.

To compound the problem, existing regulations diverge by region. There are differing standards for voluntary ESG disclosures – from the Sustainability Accounting Standards Board to the Global Reporting Initiative, the Carbon Disclosure Project and the UN Global Compact – all with different needs and principles around application and understanding of what the standards should be. Unsurprisingly, the International Organization of Securities Commissions has recently been obliged to assemble a task force to deliver a more cohesive, transparent and standardised form of

ESG disclosures. Until then, the best that investors can do is regard available data on the 'S' pillar as a guide, not a single source of truth.

However, the winds of change are evident.

2. Key drivers

Long before the Covid-19 pandemic, ESG investing was widely recognised as a foundational trend in pension portfolios. Since then, three mutually reinforcing factors have increased momentum, while turning the spotlight on the 'S' pillar (Figure 2.2).

a) The inequalities exposed by Covid-19

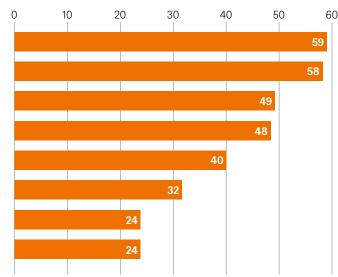
When capital markets plunged in March 2020 at the start of the Covid-19 pandemic, many observers predicted that pension investors' interest in ESG investing would only prove to be a bull market

FIGURE 2.2

What factors are/or will be driving your pension plan's interest in investing in the social factor over the next 3 years?

% of respondents





"Sustainable economies require sustainable societies. They are two sides of the same coin."

An interview quote

luxury: financial returns would, perforce, race to the top of their agenda. If anything, the reverse has happened.

The crisis showed all too clearly how external physical forces could roil the markets and whipsaw asset portfolios in ways previously unimaginable. Investors had a foretaste of some of the much-discussed 'unknown unknown' impacts of climate change and societal upheavals. Unsurprisingly, therefore, 59% of our respondents cite the need to tackle the inequalities exposed by the pandemic as a key factor driving their allocations to the 'S' pillar.

These inequalities had been building up over the past 40 years as the rise of turbo-charged globalisation and digitalisation created winners and losers in the West. Governments failed to re-equip and reskill those who suffered job losses and stagnant incomes, as the centre of gravity in global manufacturing migrated to the low-cost emerging economies.

The transition has not been just. Both globalisation and digitalisation delivered benefits in the West. But these have accrued to many in their role as consumers, not as workers or citizens. So, fresh emphasis on the 'S' pillar reflects both the desire to have a just transition as the global economy advances towards a low-carbon future and addresses the prevailing inequalities that have built up over the decades. 40% of respondents see this desire as simply delivering their plans' vision of a more sustainable society consistent with affordable pensions.

b) The growing materiality of the 'S' pillar

The expected increase in the allocations are as much about enlightened self-interest as about their social responsibilities.

Pension plans are all too aware that they invest in companies to earn decent returns but the legal structure of the corporate entity does not take away their moral responsibility for the actions of these businesses. Hence, they are increasingly factoring in how business operations can potentially harm people and the natural environment, and attract lawsuits and penalties that damage their brand value, as revealed by the sudden collapse of the Pacific Gas & Electric Company in 2019.

Thus, 48% of our respondents recognise the growing materiality of social issues in business performance and investment outcomes; and 58% are seeking good long-term risk-adjusted returns (Figure 2.2). In this context, the focus on the long-term is deliberate because their liabilities stretch over the next 40 years. They rely on sustainable economies to meet them.

In general, pension plans' ESG exposures are now seen as critical to conveying information about future risks that remain obscure to conventional risk models. As economies have evolved and progressed, new forms of risk have emerged. ESG investing is seen as focusing on the latest and most severe risks that modern societies face.

c) The rising regulatory tempo

European governments and regulators, for their part, have been keen to ensure that the fiduciary role of pension plans embraces the sustainability agenda. 49% of our respondents see this development as influencing their allocations to the 'S' pillar, as shown in Figure 2.2.

Currently, the EU has the most advanced suite of ESG regulatory measures of any global region. These are expected to crystallise into a benchmark standard over time and form a template for other jurisdictions to adapt. The measures have two goals. The first one is to channel private capital towards financing genuinely sustainable economic activities that fulfil the EU's SDG and Paris Agreement commitments. The second goal is to require financial services firms to integrate ESG risks both into their own balance sheets and their clients' investments.

"When the regulators mandate ESG reporting, it could be a game changer."

An interview quote

The non-Financial Reporting Directive, which first went live in 2017, already requires large EU corporates (including financial services firms) to disclose data on their firm's impact on ESG factors and vice versa.

Just as notably, US companies may be required to disclose more information on carbon emissions, diversity and other types of sustainability metrics in the coming years, if the Biden administration makes good on its election promise.

Under the current Securities and Exchange Commission regulations, US public companies are able to cherry-pick what they want to disclose in their annual sustainability reports. They tend to cover information that matters to their investors' perception of the business. Now, the SEC is under growing pressure from asset owners and asset managers for mandatory disclosures of ESG issues from all public companies.

3. Key asset classes

In the presence of the blockers identified earlier, pension plans' allocations to social-related passive funds are thinly spread and heavily skewed (Figure 2.3). Over the next 3 years, a varying rate of growth is expected in every area identified in the figure. Three broader points are noteworthy, as covered in the next three subsections.

a) Equities are the most preferred asset class

Currently, 53% of our respondents rely on equity-based passive funds to invest in the 'S' pillar. And this figure is likely to rise to 62% over the next three years. The implied concentration in a single asset class is dictated by a number of reasons.

First, it reflects the current state of the supply of indices for the three pillars of sustainability. These indices reflect a dual hierarchy. In terms of coverage, they are overly oriented towards a broad ESG index that mixes all three pillars in a single index. In terms of disaggregation, there is far greater coverage of the 'E' and 'G' pillars: the 'S' pillar trails way behind. The implication is clear: since there are not enough indices for the 'S' pillar, most of its investing is done via their broader indices. In turn, at this stage of their evolution, such indices are oriented overwhelmingly towards equities.

Second, the appeal of equities as an asset class of choice has been further enhanced by the booming state of equity markets since the 2008 credit crisis. Quantitative easing programmes of central banks have fired up both equity markets and passive funds.

Third, equity investing is especially amenable to stewardship, covering engagement and proxy voting.

b) Fixed income is set to catch up

Currently, only 28% of our respondents invest in the 'S' pillar via fixed income products, a number that will nearly double over the next three years. Most of the current allocations rely on broad ESG indices, while thematic funds tend to be oriented more towards the 'E' and 'G' pillars.

Supply constraint aside, fixed income instruments tend to overly rely on a quantitative process that centres on inflation, interest rate, credit quality and liquidity risks. These have made it harder to incorporate ESG principles.

Progress in this area so far has mainly targeted climate risks. The range of fixed income indices that explicitly target social ends is limited. The indices currently in use pursue multiple SDGs that provide an explicit pledge of funds towards specific ends, as we saw in Figure 1.4 in the *Executive Summary*. Issuers are legally obliged to integrate their future intentions in their 'use of proceeds' documentation alongside a framework that earmarks the proceeds towards the targeted outcomes.

However, an evolution from 'green' bonds to 'sustainable' bonds and on to 'sustainability-linked'

"Sustainability-linked bonds that adjust the coupon value to outcomes are set for take-off."

An interview quote

bonds is currently underway. The latter make coupon adjustments, if the issuer does not meet the predefined sustainability targets by a specified date.

Future growth in passive funds is likely to target such bonds as they gain traction. Although they carry low coupon, they are expected to benefit from price action, as and when they are included in the bond-buying programmes of central banks.

c) Private markets will attract interest

An outstanding feature of pension plans' asset allocation over the past 20 years has been a steady increase in illiquid assets like private equity and real estate. Many plans have developed governance structures and skill sets to venture into these private market instruments.

However, the rise has yet to be reflected in their allocations to thematic funds relying on indices targeted at private markets because of the dearth of index products currently.

Passive funds, by definition, are meant to be liquid. So, creating liquidity around them in private markets has been challenging, especially

in areas like private equity and infrastructure; but less so around real estate where Reits provide a convenient vehicle. However, over the next three years, innovation is expected in this area as investor appetite for private market indices rises.

4. Key manager selection criteria

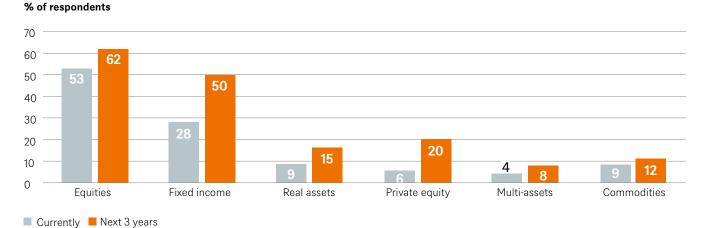
When it comes to selecting index managers for investing in the social pillar, our survey respondents have cited a number of criteria that fall into three clusters discussed below (Figure 2.4).

a) Sustainability in corporate DNA

The most widely cited criterion is the manager's capability and track record to fulfil the client's social agenda (67%). Another is the manager's business culture (58%). A less widely cited criterion is expertise in the customisation of indices (23%). The three are deemed to be closely linked and define managerial pedigree.

Pedigree is vital because the sustainability bandwagon has attracted managers who satisfy none of these criteria, but who have sought to rely

FIGURE 2.3
Which asset classes are covered by your plan's social-related passive funds currently and which will be covered over the next three years?



"Regulators now insist that index investing does not exempt us from our responsibilities as shareholders."

An interview quote

on greenwashing by repurposing their old funds with new labels. It is as if sustainability is a flash in the pan: here today and gone tomorrow.

Pension investors are wising up as they see sustainability as an evolutionary journey of experiential learning where ideas beget ideas, talent begets talent, and success begets success. The journey enjoins business leaders at asset management firms to set the 'tone at the top' by doing four things.

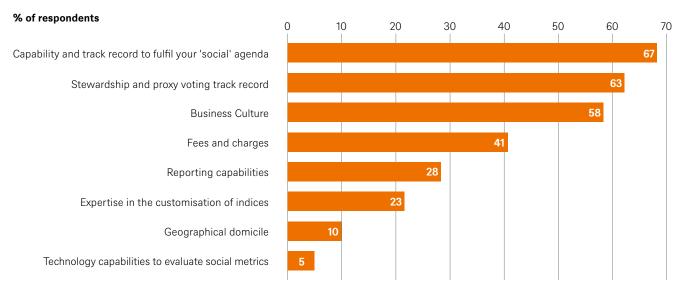
First, creating a culture and belief that sustainability is not just another fad but a seachange in the way investing is to be done. Second, harnessing the collective memory of the business via joined-up thinking between the investment team and the stewardship team. Third, ensuring that portfolio managers and research analysts develop the requisite expertise into the dynamics of sustainability factors. Fourth, encouraging regular dialogue with investee companies to monitor progress.

b) Passively active

Another important, albeit related, selection criterion is stewardship and proxy voting track record (cited by 63%, Figure 2.4). This was the subject of our 2019 annual survey, 'The rise of stewardship'. In this year's survey, although it is seen as part of the first cluster on corporate DNA, it merits a separate mention as well. This is because, in the absence of reliable data, it is seen as the key way to understand the nature and impact of a company's social practices on the ground.

As Case Study 2b shows, an index is not a fiduciary but that is what their investors now expect it to be. With the headlong rise of passive investing since 2005 has come the stigma of ownerless companies that thrive on oligopolistic practices that drain their economies of dynamism and externalise social costs by outsourcing manufacturing to low-cost emerging economies with a poor record on labour standards and environmental protection.

FIGURE 2.4
When selecting your external asset manager for investing in social-related passive funds, which criteria do you take into account?



"Stewardship is emerging as a key point of competition between index managers."

An interview quote

This stereotype sits uncomfortably with pension plans whose fiduciary role is being distinctly tilted towards sustainable investing. At its heart sits shareholder activism that targets real-world outcomes at scale. That apart, activism is also perceived as an instrument of enriching the current infrastructure of data, skills and technology, while it evolves to meet investor needs.

This is all the more pertinent in the case of passive investing where investors cannot cut off the flow of funds to society's corporate 'villains' by dumping constituent stocks in an index – unlike active managers.

A more effective channel for changing corporate behaviours is direct engagement with investee companies – often in collaboration with other investors to exercise maximum leverage. It is based on the belief that those who are part of the problem can also be part of the solution. Currently, the top three index managers hold nearly USD 20 trillion of AuM, nearly a tenth of all global securities. Their

collective heft potentially gives them a dominant role as agents of change. They and other index managers must continually strive to drive positive change. That is the value of patient capital. Their clients now expect no less.

For their part, investors have to accept that there is no one-size-fits-all tool for social impact. Instead what they should expect from their index managers is transparency in reporting and a commitment to learn and improve.

c) Meritocratic fee structures

As competition between index managers has intensified, fees & charges have been declining, to the point where they are no longer the key point of competition in sustainable investing. Stewardship is now in pole position.

However, 41% of our respondents still see a meritocratic fee structure as a manager selection criterion.

Case study 2b: The index is not a fiduciary but its manager is

By its very nature, an index is not a fiduciary, but simply an opportunity created by its providers who are not obliged to recognise the interests and constraints of its end-investors. A fiduciary, in contrast, is obliged to exercise a duty of care by putting clients' interests and needs above all else.

For long, passive index fund managers have been seen as lazy owners of companies, allowing unaccountable managers to put their own interests above those of their shareholders.

That stigma of ownerless companies, however, has been fading with the rise of ESG investing, which now enjoins index managers to be active stewards of capital, since they are the forced owners of the shares they hold. Unlike active managers, they cannot dump their positions in badly performing companies. With the price of index funds falling in recent years, stewardship is now key differentiator in the index world.

Regulators now expect us to improve our ESG credentials. So, we are enjoining our index managers to actively exercise their voice when engaging with companies in their indices to influence practice in areas that can materially improve the quality of our beta assets. Currently, our chosen areas include gender representation at all workforce levels as well as other diversity metrics such as ethnicity and nationality, employee retention, equal remuneration practices and employee well-being programmes to support family and work-life balance.

Without active engagement, passive funds risk losing their relevance in the ESG landscape.

A German pension plan

"This is the age of theme investing that transcends market cycles."

An interview quote

On the one hand, they recognise that, as a value-adding activity, sustainability-based stewardship is an expensive undertaking, requiring a breadth of knowledge about a company's market environment and regulatory issues; and a depth of experience about its business strategy and real-life outcomes. Multiplicity of skills apart, stewardship thus requires extensive dialogue over an extended period to achieve the intended goals. Unlike proxy voting, it's not a one-shot exercise. So, fees should factor in its cost.

On the other hand, with the wall of new money now going into passive funds as they advance into the core portfolios of pension plans, the scope for economies of scale remains considerable. This is all the more so as index managers also work closely with their peers within various global coalitions to influence corporate behaviours towards sustainability goals.

Hence, greater transparency around fees and charges is essential to ensure that the fruits of scale economies are shared more equitably between index managers and their clients.

5. Key growth points

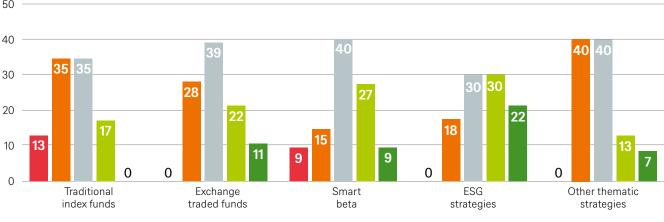
Looking ahead over the next three years, pension plans' allocations to passive funds will continue to benefit all the vehicles. But it will be increasingly skewed towards ESG and other thematic funds and ETFs (Figure 2.5).

Advances in big data and artificial intelligence are set to benefit thematic ETFs that enable investors to focus on selective growth points in the global economy that are less exposed to the usual market cycles.

The rising popularity of theme investing over the past two decades rests on the view that certain mega-trends often reshape the world and create investment opportunities in the process. Being long-term in nature, the trends do not readily appear on investors' radar. The companies at their vanguard periodically trade at a discount. But when their potential becomes evident, a powerful bandwagon effect can result.

FIGURE 2.5
What will be the approximate annual growth in your pension plan's investment in passive strategies over the next 3 years?

% of respondents



Source: CREATE-Research Survey 2021

■ Below 0% ■ 0% ■ 0.1–5% ■ 5.1–10% ■ Above 10%

"Today's capitalism needs a big reset."

An interview quote

If anything, the pandemic has given an added twist to this trend. In previous crises, policy action targeted bricks and mortar projects.

In the current crisis, it targets green and digital sectors in the key economies. The European Union's Green New Deal worth €225 billion is a case in point, as is the Biden administration's proposed USD 3 trillion green infrastructure plan. Mega-trends matter because they disrupt industries and give rise to clear and predictable sources of value creation, as evidenced in the recent past by the rise of emerging economies and digital technology.

As Figure 2.5 shows, ESG investing is likely to power the next wave of growth in passive funds.

In conclusion, at the same time, our survey respondents recognise that their capital markets alone cannot cure the ills of our societies. Governments need to play a lead role, rather than abdicate responsibility to central banks, as happened after the 2008 crisis (Case Study 2c).

Even so, business leaders today face a choice: they can reform capitalism, or let capitalism be reformed for them by an angry public.

Case study 2c: Modern capitalism needs a makeover to survive

Since the US Business Roundtable binned its orthodox stance on shareholder primacy in August 2019 in favour of a stakeholder approach, the old capitalism is being reshaped. But it is one thing to talk about a new purpose for the post-pandemic age, quite another to deliver it. History rarely travels in a straight line.

So far, it is not clear how members of the BRT are matching words with deeds. For example, the Biden administration favours more union recognition for American workers. It is not clear what stance index managers are taking – both privately and publicly – on this social issue which many see as a test case of their stewardship role.

So far, in any case, the ringing declarations from capitalism's titans alone will not give it new social expression. Today's societal ills owe a lot to cumulative benign neglect on the part of governments while the

global economy was being radically reshaped by tidal waves from the turbo-charged rise of globalisation and artificial intelligence. So pervasive and deep-seated have been their unintended social impacts on disadvantaged communities that only governments can right the wrongs, not businesses.

So far, in the meanwhile, there is only so much that pension investors like us can do other than believe that the financial system is reflexive: where landscape changes affect and are affected by participants' beliefs and actions. We will continue to increase our allocation to passive funds that target better social outcomes that are material to corporate performance. But the role of governments should not be underestimated.

An Austrian pension plan

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Passive funds continue their advance

How are passives changing pension portfolios?

Following the market crash in 2020, huge inflows into passives have continued, confounding the naysayers who expected the bear market to reverse the trend. However, the inflows mark one notable compositional change. The relentless rise of 'tech' stocks has made traditional cap-weighted funds top heavy and has given rise to concentration risks. As a result, growth has worked against them and favoured ETFs and smart beta funds mostly pursuing ESG themes.

Equities remain far and away the most favoured asset class in passive investing, with fixed income and real assets still some way behind. The latest extraordinary stimulus from central banks and governments has put a rocket under equities, while zero-bound rates have made bond indices less attractive. In addition, index construction appears to conspire against those who like to hold bonds to maturity. But over the next three years, some catch-up is likely, as equity's share approaches saturation point.

The old adage that 'time in' the market matters more than 'timing' the market continues to be reflected in the holding periods of all vehicles of passive funds. Portfolio adjustments in the wake of the market crash in March 2020 have not affected this belief. A clear majority prefer to hold their passive funds for more than two years, so as to allow for mean reversion to work after periodic bouts of volatility. Smart beta, traditional index funds and ETFs may see further extension in holding periods over the next three years.

1. Concerns about concentration risks

As Figure 3.1 shows, the share of all passive funds in our respondents' total pension portfolio has recovered after the market dislocation in March 2020 and has since resumed its upward trajectory.

The rise seems to have been more evident in ETFs and to a lesser extent, smart beta. In contrast, the share of traditional cap-weighted indices seems to be flat, at best.

The market environment has been especially conducive to the rise of cap-weighted indices since 2005. The trend received fresh impetus in 2009 from quantitative easing by central banks in America, Europe and Japan.

This has turned investment returns into a monetary phenomenon by decoupling financial markets from the real economy (Case Study 3a). The perception that the US Federal Reserve will always come to the rescue when markets tumble has effectively put a floor under asset prices and suppressed their volatility.

As a result, markets and individual securities have been broadly moving in lock-step. Active investing, which had long thrived on wider dispersions of security values, has come under stress as a result, and passive investing has flourished.

This process has received added impetus as regulators in many global fund regimes have turned the spotlight on fees by exposing closet tracking: the practice of staying close to the benchmark index, while claiming to be an active manager and charging higher fees.

"Cap-weighted indices are becoming top heavy, as the tech giants attract the lion's share of new inflows."

An interview quote

The resulting concerns have also favoured passive investing, as regulators have insisted on full transparency around fees and charges such that the end-investor's best interest overrides all other considerations.

Hence passives have enjoyed strong structural tailwinds – until this year, when key indices became too top heavy to actually track the market, or a significant part of it. For example, in 2020, the top five tech stocks – Apple, Amazon, Facebook, Microsoft and Google's parent, Alphabet – ended up with almost a quarter of the S&P 500's weight. Even when a big chunk of the market was down, these giants pulled the entire index to record levels.

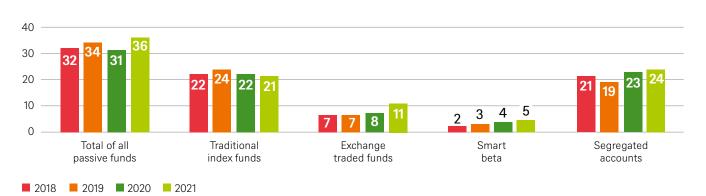
Some of these tech companies are attracting increasing regulatory scrutiny, as they have turned into veritable monopolies by acquiring fledgling competitors. As a result, our respondents are rebalancing their passive portfolios (Figure 3.2) by reducing the share of cap-weighted indices. There is also another dynamic at work.

Discount rates played an important part in the tech stocks' rise because the long decline in bond yields caused the net present value of their strong future cashflows to go sky high. Evidently, a drop of 1.5 to 2 percentage points in real long-term interest rates could boost their stock price by as much as 50%. Conversely, a rise in rates could have the opposite effect.

Some of our respondents are thus showing renewed interest in active funds, as the long-awaited revival of value investing has gained traction since November 2020. The key reason is that market forces have been pushing up bond yields in ways that herald the diminishing influence of central banks in distorting asset values. Whether the revival is temporary or prolonged, only time will tell.

At this early stage, our respondents appear to continue using a pastiche of passives and actives. The increase in their new allocations to value style is seeing more a rotation from poor to good performers within the active space, than a diversion of new money from the passive space.

FIGURE 3.1
What is the approximate percentage share of your passive allocation in your pension plan's total portfolio currently?



Source: CREATE-Research Survey 2021

% of respondents

"Finance has a tendency to take all trends too far, and passive investing is no exception."

An interview quote

Case study 3a: Cap-weighted indices are becoming top heavy

Actives make sense in volatile, unpredictable or illiquid markets. Passives make sense in rising markets. Actives make sense in inefficient markets. Passives make sense for highly efficient asset classes, or where reputational and regulatory considerations disfavour active funds. Indeed, there is a wide range of mid, small and microcap companies beyond the reach of the index that have all been shown to outperform large cap over the long term.

However, active funds have struggled since the 2008 crisis as investment returns have increasingly turned into a monetary phenomenon – influenced far more by monetary largesse from central banks than by the earnings boost from the real economy. This distortion has favoured passive funds that have far out-performed their active peers. Last year, our passive equities delivered an impressive net total return of 18%, versus 6% from our active portfolio.

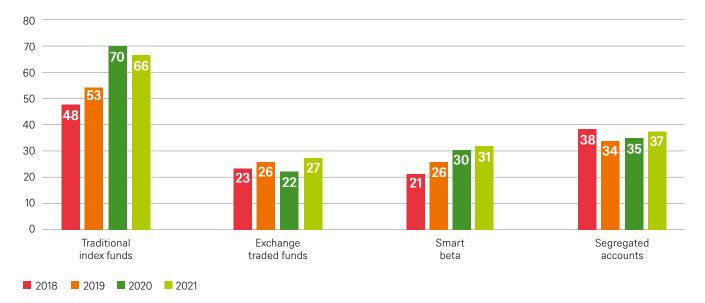
Since then, the concentration risk has risen markedly in our passive portfolio, as just five tech stocks accounted for 22% of the entire S&P 500 index at the end of 2020 – the highest level in history. Together, they delivered 54% of the entire absolute returns of the US stock market. An equal-weighted version of the index increased by only half that amount.

Hence, we are reducing our allocation to cap-weighted indices. Equally, we plan to go overweight in actives. The long-awaited revival of value investing is finally here, as central banks' influence has started to wane with rising yield in bond markets recently. If durable, it might change the composition of our passive funds.

A Canadian pension plan

FIGURE 3.2
If your pension plan already invests in passive funds in general, what is your preferred vehicle?

% of respondents

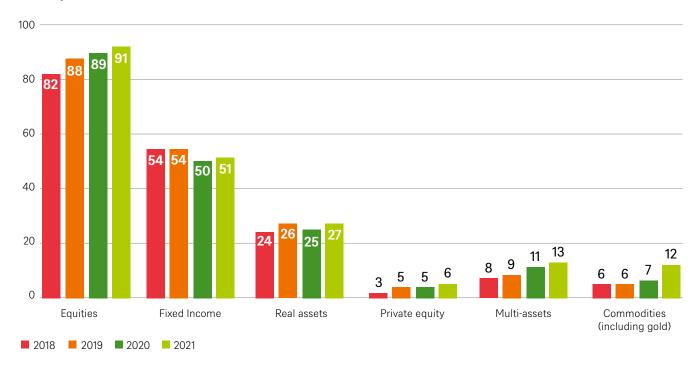


"Our trustees have a high comfort level for equity index funds, after using them for decades."

An interview quote

FIGURE 3.3
Which asset classes are covered by your plan's investment in index funds currently?

% of respondents



Source: CREATE-Research Survey 2021

2. Broader asset base

As we saw in Figure 2.3 in Section 2, the passive funds that are used to invest in the 'S' pillar mostly rely on two asset classes: equities and, to a lesser extent, fixed income. This finding is indicative of a broader trend which has favoured these two principal asset classes in pension portfolios (Figure 3.3).

Far and away, equities have been the most preferred asset class for passive investing since the annual DWS-CREATE survey started in 2018. 91% of our respondents use this asset class in their passive portfolio, marking a rising trend at least during the recent past.

This overwhelming focus is unsurprising. To start with, the index revolution in equities first started in the 1970s. What fueled their rise thereafter was the fact that the performance of active managers was faltering somewhat by 1980, as the number of asset managers with highly qualified staff increased exponentially, creating an overcrowded field in which everyone had to run faster just to stand still. Whatever its size, alpha had to be shared between too many players.

Before then, active managers competed principally against individuals, conservative mutual funds and trust institutions. While competing against these less well-informed investors, active managers were able to deliver alpha.

"Multi-asset index funds offer an opportunity to pursue multiple goals in a low-return environment."

An interview quote

Over time, this sparked a migration of disappointed retail investors towards passive funds. This was equivalent to the weaker players leaving the poker table, making the game less attractive for those who remained at the table. Over time, this process has extended to pension investors too, such that roughly nine in every ten plans are now invested in equity passive funds.

The corresponding number for fixed income is one in every two (Figure 3.3). Here, the trend line has been flat for the past four years for two reasons.

First, due to ageing demographics, the majority of the pension plans in our sample are in the decumulation phase as the first and largest cohort of post-war Baby Boomers entered their golden years. Plans have been de-risking their portfolios by going overweight in fixed income. For a significant

minority of them, the construction of fixed income indices has not been attractive for those who prefer to hold bonds to maturity (see Case Study 3b).

The second reason behind the flat trend is that the performance of active fixed income funds has remained impressive. Active bonds funds have largely outperformed their passive peers after fees. That is because periodic downgrades by rating agencies often create 'fallen angels' that create opportunities for active bonds managers to sell highly rated funds to forced sellers. Looking ahead to the next three years, one thing is clear: not only will the asset class coverage of passive funds broaden, but it will deepen as well (Figure 3.4).

Taking them in turn, broadening will occur as passive investing will increasingly embrace

Case study 3b: Buy-and-maintain strategies limit the use of bond passive funds

Nearly 40% of our portfolio now relies on passive funds. Equities account for two-thirds of it, while bonds account for a quarter.

Our overall bond portfolio is designed to hold every bond to maturity, exposing it to credit risk from a potential defaulting security. To counter that, we use cash flows from maturities and interest income to reinvest as and when good buying opportunities arise.

This approach is not easy to implement with passive bond funds, which typically rebalance each month according to predefined criteria. They are also meant to sell a bond automatically when it is downgraded, no matter its price, and no matter the likelihood of default. Worse still, divestment occurs after market makers have already marked down the price. Downgrades do not automatically lead to default, even though that is the implicit assumption.

Passive funds are also expected to sell a year before a bond's maturity date. This means foregoing any 'pull to par' performance. This happens when bonds priced below their par value appreciate in value on their approach to maturity.

Another challenge is that the cap-weighted bond index tends to be concentrated in the most indebted corner of the market. For example, the top 10 issuers in the ICE Bank of America Global Bond Index account for 25% of the index, giving rise to concentration risk.

Hence, we adopt a pragmatic approach that blends passive bond funds with active credit management, which gives us the best of both worlds: low cost and higher returns.

A UK pension plan

"Passives are now seen as part of the buy-and-hold portfolio."

An interview quote

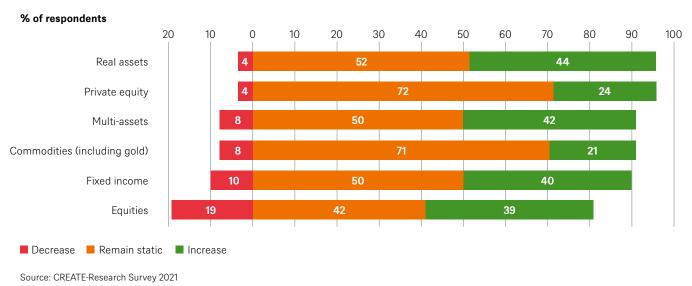
those asset classes that have hitherto had a low penetration rate. These especially include real assets and multi-assets.

The interest in real assets is dictated by the search for yield, as rates on traditional fixed income instruments have plunged to record lows. Interest in multi-assets, on the other hand, is influenced by three considerations. One is to achieve broad diversification to include key growth points in the global economy such as technology, healthcare and emerging markets. Another consideration centres on the rise of factor investing, as mentioned earlier in this section. This trend reflects the growing consensus that factor risk premia, whether in

equities or other asset classes, generate the lion's share of long-term investment returns. The third consideration is the rise of outcome-oriented investing to produce a specific risk-adjusted or absolute return target, or reduce volatility, or generate income or meet a particular liability profile. A multi-asset strategy can then be developed to help meet the chosen outcome, utilising a diverse range of asset classes or risk premia.

Moving on to the deepening of the passive portfolios, this is being targeted by increasing the already high share of equities and fixed income. It underscores the point that by advancing into core pension portfolios, the rise of passives is indeed a structural trend.

FIGURE 3.4
How is the coverage of asset classes in your plan's investment in index funds likely to change over the next 3 years?



"Although we invest in passive funds, we are well aware of their limitations."

An interview quote

3. Longer holding periods

The majority of our respondents now have holding periods of passive funds in excess of two years (Figure 3.5). This is yet another indication of the deepening of their passive portfolio.

As the share of passives in pension portfolios started to rise after the 2008 crisis, market observers distinguished between the buy-and-hold bucket and the opportunistic bucket. Passive funds in general and ETFs in particular were put in the latter bucket because of their ability to slice and dice the investment universe at different stages in the market cycle.

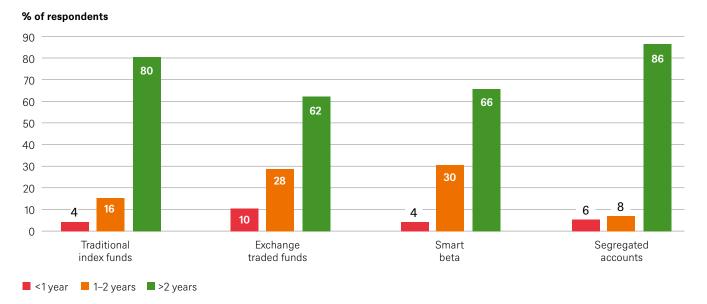
However, over time, as passives have met investors' return expectations net of fees, they have been transitioned into the buy-and-hold bucket. They are cheap because investors are not required to research the securities that are in

the index so as to beat it. Passives also require minimal governance by offering a 'set-and-forget' autopilot option.

This transition has accelerated as the majority of active funds have underperformed against an appropriate market benchmark after costs. And the success of the rest could not be guaranteed to persist over extended periods. That is not to say that pension plans do not recognise certain weaknesses inherent in the two key components of passive funds: cap-weighted indices and ETFs.

In cap-weighted indices, companies are included because of their size, not their intrinsic merits. Exceptional companies are packaged with the mediocre ones, as part of bulk buying. They all make booms and busts more extreme due to the inherent tendency to buy high and sell low, via strong price momentum in both directions.

FIGURE 3.5
What is the approximate holding period of the four categories of passive vehicles currently?



"Factor investing is on the rise, and so is smart beta."

An interview quote

For their part, ETFs carry the potential to conspire against the two traditional functions of markets: price discovery and efficient allocation of capital.

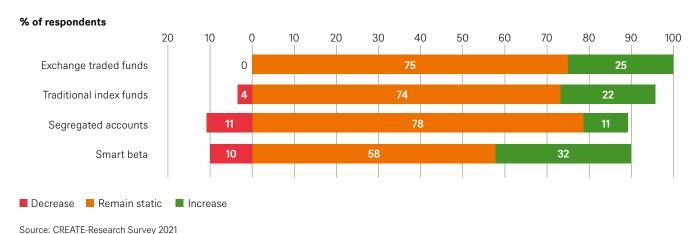
For now, and on balance, despite these limitations, our survey respondents will continue to increase their allocations to passives and also extend the holding periods (Figure 3.6). Two vehicles are likely to see a more widespread increase in holding periods: smart beta and ETFs. Smart beta will benefit on the back of the rising interest in factor investing (Case Study 3c). The traditional asset class diversification did not work for many investors when it was most needed in the last three bear markets. That is because their correlations have proved asymmetric: low in the rising market and high in the falling market. Another reason is that it is becoming increasingly possible to pursue the sustainability theme via smart beta.

As for ETFs, they are seen as an ideal wrapper because of attributes such as intraday liquidity, transparency and tax efficiency. They, too, are viewed as an ideal vehicle for pursuing the sustainability theme. Fears about the underlying liquidity of bond ETFs have proved premature, since they did not suffer during the March 2020 market dislocation on anything like the scale that observers had feared. Rescue action by the Fed no doubt helped. Be that as it may, 0% of our respondents expect to decrease their holding periods of ETFs, as shown in Figure 3.6.

In sum, passives are now a central feature of pension portfolios. It is unwise to say that passives are good and actives are bad. Both have merits and limits. Although conceptually opposite, passives and actives are now regarded as complementary when it comes to their strengths and weaknesses.

FIGURE 3.6

How will the approximate holding period of the four categories of passive vehicles change over the next 3 years?



"Sustainable investing will come to permeate every asset class."

An interview quote

Case study 3c: Can smart beta morph into smart sustainability?

The rules-based approach of smart beta funds has served us well in the past 10 years. They benefited from a unique environment where asset prices were largely influenced by the extraordinary monetary easing by central banks, which borrowed against future returns.

Looking ahead, we expect to be in a low-return/high-volatility environment. That means we should take advantage of the more active risk associated with smart beta. Indeed, we no longer put smart beta in the traditional passive camp. It is a hybrid, sitting somewhere between the 'set-and-forget' approach of passive funds, and analysis-heavy stock selection by active managers.

This hybrid supports our core investment belief that seemingly different asset classes can have unusually high correlations due to their underlying exposure to common risk factors. This has taken us down the road of risk factor investing. It helps us to minimise

the correlation between our return-seeking assets and the liability hedges we use.

Under the emerging approach, we use multi-factor combination and fundamentally weighted strategies for those allocations with longer time horizons. Our current focus is on value and low-variance factors. Our research shows that most of the returns come from one or more traditional risk factors rather than stock picking.

Another change concerns the use of ESG considerations in the smart beta space. Currently, we apply negative screening in the underlying indices. But as the track record of those funds relying on ESG integration builds up, our portfolio will expand its sustainability footprint. This will be a key growth area for us.

An Australian pension plan

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