Pensions Policy Institute

PPI

How do UK pension schemes approach investment into overseas assets?

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The future is ever changing, but the PPI remains a constant "Voice of Reason" in the ongoing debate on the future of retirement in the UK.

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EST. 2001

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How do UK pension schemes approach investment into overseas assets?

Foreword

By John Edwards, Her Majesty's Trade Commissioner for China and Hong Kong

We are facing an age of multiple challenges. We can only face these challenges by working together. That is why the Department for International Trade in China has sponsored this research report, implemented by the experts at the Pensions Policy Institute in the UK. This research addresses the question of how globally allocating pension assets can help build robust, future-proof industries that safeguard the financial wellbeing of citizens.

This report shares the experience of the UK, with insight gathered from a broad range of industry experts, practitioners and regulators. When facing our own pension crisis several decades ago, our government realised that a new balance must be struck between State, employers and individuals to share the responsibility to save and provide for the future. China's recent fourteenth 5-year plan echoes such thinking and noted the need to develop a multi-layered pension system. This report details how the UK built its own multi-pillar system and bolstered its impact through freely and globally allocating pension assets to diverse markets and asset types, spreading risk and fostering market competitiveness. We hope this acts as a road map for China's central pension reserve fund as it looks to international markets and new opportunities, as well as for China's forward-looking regulators as they shape policy and reform in the coming years. The foundations laid now will last for all future generations of retirees; and beyond, as pensions increasingly align with sustainable principles and build in the mechanisms to weather future crises.

I very much welcome this research and welcome the discussion and cooperation it will foster as we move together towards safer, better and greener pensions.

John Edwards

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Executive Summary

This report explores how trends in global asset investing by pension schemes have developed over time and may develop in the future. This summary covers the main points of the report and acts as the conclusion.

This research was supported by interviews with key professionals in the field of global investment. These interviews inform the narrative of the report. Interviewed organisations include pension schemes, asset managers, consultants, trade bodies and Government.

For the full list please see page 11

The UK pension system has historically been dominated by Defined Benefit (DB) schemes, but Defined Contribution (DC) schemes are taking over

Roughly 89% of private sector DB schemes are closed to new members, and over half have frozen all new benefit accruals. Reasons include changes in policy that have reduced the attractiveness to employers of providing DB pension scheme, and increased costs resulting from low bond yields and longer life expectancy.

In place of DB, the DC model has become more common - a trend that has been bolstered by the introduction of automatic enrolment from 2012. In 2020 there were around 14.6 million active members in DC schemes and 6.7 million in DB schemes (including the public sector).[1] However, DB schemes still hold the majority of assets.

1 PPI Modelling

Overseas investment is a key element of investment strategy for both DB and DC schemes

A well-functioning investment programme is fundamental to the effectiveness of a pension system. While domestic markets are the most familiar and the easiest to access, the global capital markets greatly exceed any single domestic market in size, diversification and breadth of opportunity. As a result, institutional investment has become an essentially global activity.

The primary function of non-domestic investment is to provide access to a broader range of potential investment choices

The benefits of overseas investment can include:

- a larger range of assets and a more balanced mix of sector exposures than is possible within any single domestic market
- access to economies, asset classes and sectors that may be limited or not available at all in the domestic market
- a wider opportunity set for active management
- expanded opportunities to gain desired Environmental, Social and Governance (ESG) exposures and impact.

The UK regulatory context is generally favourable to a global investment approach

UK schemes are encouraged to pursue an appropriate and diversified allocation of assets. The combination of the UK's position as a global financial centre, large pension market, and its history of freedom from regulatory restrictions means that there is considerable depth of institutional experience of non-domestic investment.

Global investing requires weighing potential risks and practical implementation factors against the potential for return

DB schemes take a global approach to equity investment, but overseas allocations are likely to decline as schemes mature

For UK DB pension schemes, the whole global equity market has increasingly become seen as being the opportunity set, with UK and non-UK companies treated as being equally suitable for the portfolio. However, this globalisation of approach is taking place in the context of a declining allocation to equities. The closure of schemes and the freezing of benefit accruals leads to a greater focus on the matching of scheme assets to liabilities and increased investment in UK-issued long-term debt, since it is this instrument that offers the best liability-matching characteristics.

At the same time, the typical management structure has evolved to a more integrated global approach, although the legacy of the regional approach to equities is still visible in many UK fund structures.

Within DC schemes, the trend to global investments is growing

Among DC schemes, international allocations have grown, and are likely to continue to do so as this segment develops.

Growing interest in illiquids and a search for global opportunities

Like many large institutional investors, some UK pension schemes are moving beyond the most liquid markets into various alternative assets, such as private equity, private debt, real estate and infrastructure. This approach is most common among large schemes (with the exception of the most mature DB schemes, whose shorter time horizon makes illiquid assets less suitable).

Because they are held for diversification and growth purposes, illiquid asset investments are generally approached globally.

There are several key trade-offs in overseas investment

UK pension liabilities are denominated in sterling, so investment in assets denominated in other currencies introduces a currency mismatch

The main risk associated with global investing is currency risk; the risk of significant volatility in asset values arising from investing in assets denominated in a different currency from that of the investor. For major currencies, it is possible to isolate and manage this risk through the use of forward currency contracts. Currency hedging of non-domestic developed market fixed income holdings is therefore common.

Domestic investments tend to work better for DB liability matching

As liability matching becomes more widespread among DB schemes, the focus on searching for global opportunities weakens, and hence international investment will decline.

Decision-making structures influence the approach to international investment for both DB and DC schemes

Within the overall framework set by the strategic policy benchmark, day-to-day management responsibility is delegated to one or more investment managers. Larger schemes will use a range of organisations, seeking out specialist expertise in specific asset classes. Some very large schemes manage some or all of the assets in-house - an approach which requires significant organisational commitment.

The emergence of master trusts is an especially noteworthy development within the DC system. Master trusts consolidate the pension schemes of multiple employers into a single arrangement, building greater scale, and bringing benefits in cost and professionalism.

Sustainability and the financial implications of ESG factors have become increasingly important considerations

ESG considerations are today recognised as essential for gaining a true understanding of a business, and UK pension schemes are required to consider the resilience of their investment strategy to climate-related risks.

The availability of reliable ESG data varies significantly between markets. Even with the development of global reporting standards, it is likely that greater transparency will continue to be a challenge for investors in some markets for some time.

Overcoming the impediments to overseas investment

Challenges can roughly be broken up into three main areas: practical barriers, investment risk, and areas of uncertainty (Figure EX.1).

Figure 4.1 challenges related to global investment

	Practical barriers	Investment risks	Areas of uncertainty
Challenges	• Investment costs • Lack of familiarity • Oversight and governance • Finding skilled investment managers • Legal restrictions	• Liquidity • Volatility • Currency risk • The expected benefits may not materialise	• Data issues • Political risk • Reputational risk • Shareholder rights may be weaker

As DC schemes become larger, overseas investment is likely to become easier

Many of the challenges associated with global investment relate to matters of practical implementation and/or cost. Familiarity and understanding are key factors for overcoming these challenges, along with increased scale and resources.

Finding the right partners to work with is an important part of the global investing process. Choosing a reputable global custodian will help ensure the safety of global investments and effective operations.

Although DC plan participants are able to decide their own asset allocation, the great majority follow the default strategies provided by the plan. As a result, boards put considerable effort into providing high-quality strategies designed to meet the needs of a wide range of pension savers, making greater use of expert committees, specialist staff and outsourcing to external specialists. This has allowed decision making to be more timely.

Disruption from COVID-19 will accelerate some global investment trends, making some investments easier, while complicating others

The most obvious investment impact of COVID-19 in 2020 was an exceptionally high dispersion of returns between different types of asset. Disruption and extreme return patterns create the possibility of mispricing, creating both opportunities and risk, highlighting the fragility of markets overall and the potential for a correction. The uncertainty around market prospects has been magnified by variations in the impact of COVID-19, and in the political and economic responses of many countries.

Introduction

In 2020, global pension fund assets totalled more than US$30 trillion – the UK representing slightly more than 10% of that total - with more than 30 funds holding assets in excess of $100 billion each.[2] These large pools of capital seek exposure to a wide range of investment opportunities in order to spread risks, reduce concentration, and gain access to as many sources of potential return as possible. This means a large proportion of the investments are outside the domestic markets with which the institution's managers are typically most familiar. This in turn introduces new risks and implementation challenges.

UK investors have a long history of non-domestic investment. Prior to 1979, foreign currency exchange was restricted by the Exchange Control Act of 1947. The removal of those restrictions enabled a more global investment outlook to be adopted, and a considerable body of knowledge and experience of this field has since built up among UK pension funds over a period of more than forty years.

This report sets out the history and experience of UK institutions in non-domestic investment, and what this experience reveals about the risks, rewards and practical impediments involved in investing in assets across the globe.

Chapter One provides an introduction to the structure of the UK pensions market and how regulation impacts investment.

Chapter Two provides an introduction to overseas investment by UK pension funds and a snapshot of current investment trends.

Chapter Three considers some of the primary trade-offs inherent in overseas investment.

Chapter Four discusses how global investing is likely to develop, and how the risks and impediments are being addressed.

2 OECD (2020); Willis Towers Watson (2020)

Chapter One: How is the UK pension system structured and what regulations affect investment?

This chapter sets out the structure of the UK private pension system and provides an overview of regulation affecting investment. This chapter does not discuss global investment, which is covered in chapters two, three and four.

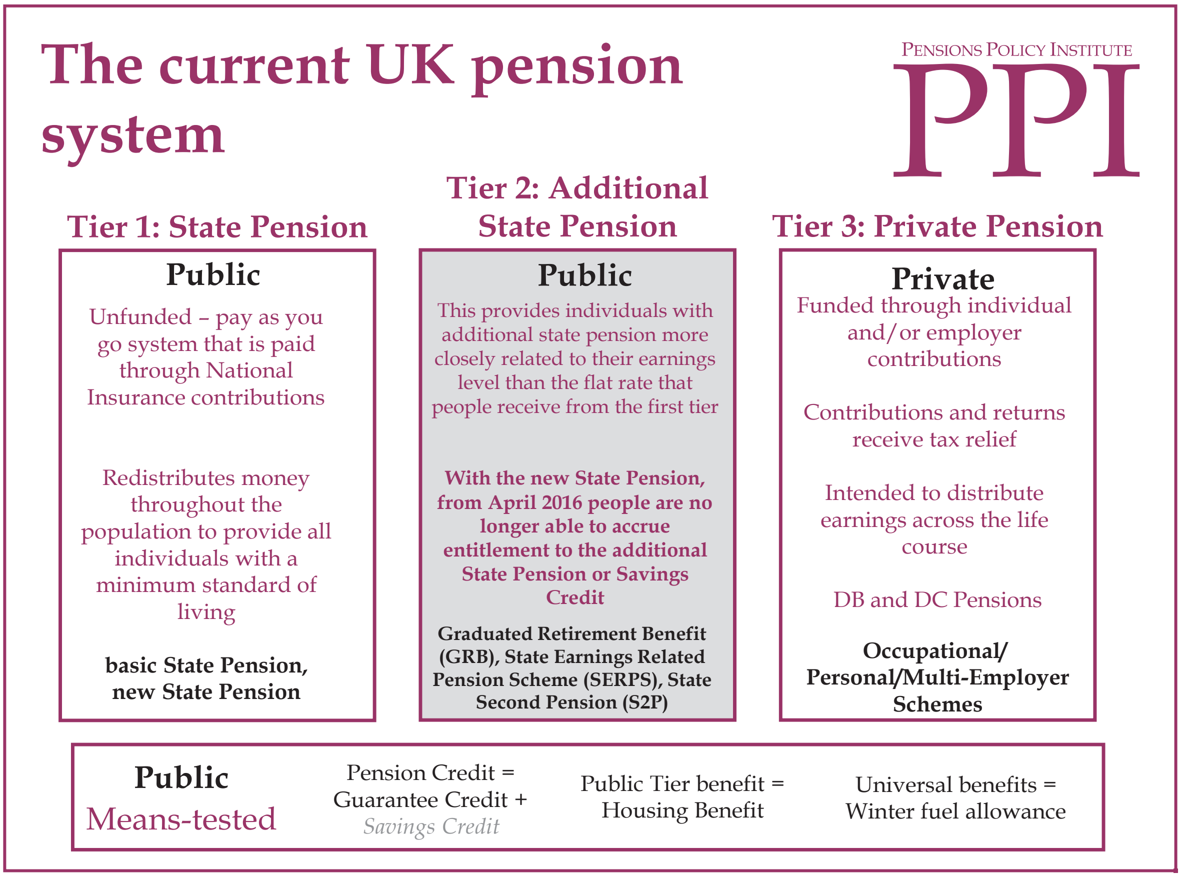
Overview of the UK State and private pension system

The UK pension system possesses three tiers:

- Tier 1 is provided by the State and consists of a basic level of pension to which almost everyone either contributes or has access, providing a minimum level of retirement income.
- Tier 2 is also administered by the State and aims to provide pension income that is more closely related to employees' earnings levels. Tier 2 is less redistributive (from higher income to lower income) than Tier 1. Tier 1 and Tier 2 operate on an unfunded 'pay-as-you-go' contributory basis, through the National Insurance (NI) system, though people can no longer accrue entitlement to Tier 2.
- Tier 3 is voluntary (private) pension arrangements that are not directly funded by the State. Private pension contributions, from the employer and/or the individual, fund designated pensions for the individual. The primary aim of private pensions is to redistribute income across an individual's lifetime. Tier 3 includes pensions arising from automatic enrolment, a policy requiring employers to enrol eligible employees into a qualifying workplace pension scheme.

Figure 1.1 illustrates the three-tier UK pensions system as it stands today. With the introduction of the "single tier" new State Pension, these three tiers will eventually become a two-tier system with a "State" tier and a "private" tier.

Figure 1.1



Private pension schemes

Private pensions include workplace pensions and those that are not directly funded by the State. Most are generally provided through the workplace, though an individual (for example, someone who is self-employed) can take out a private pension directly with a pension provider.

Unlike the State pension, contributing to a private pension is voluntary - though there is an element of soft compulsion through the system of automatic enrolment. Private pension contributions, from the employer and/or the individual, fund designated pensions for the individual, with the aim to redistribute income across the individual's lifetime.

As with State provision, private pension provision is complicated. The legislative framework has been altered over time, adding layers of new arrangements to those already in place. In addition, because individuals have varied employment histories, many will retire with a number of pensions arising from both employer-sponsored schemes and individual arrangements. The benefits from private pension schemes vary depending on scheme rules and structure.

Workplace pension schemes

Pensions provided through the employer are called workplace pensions. Workplace pension schemes can be structured as Defined Benefit (DB), Defined Contribution (DC), or hybrid/ risk-sharing schemes.

Most private pension arrangements are employer-sponsored, personal pensions, or multi-employer schemes. The employer usually contributes to these schemes, though this is not always the case with personal pensions, and more often than not, an employee contribution is required.

The employer link may be very strong; for example, some employers set up, fund and administer their own trust-based pension scheme, or the link may be weak; for example, the employer may only give access to a scheme run and administered by a pension provider. Many schemes are arranged through single employers, although multi-employer schemes are becoming increasingly popular in the private sector and there are a few industry-wide arrangements.

Group Personal Pensions (GPP) and Group Stakeholder Pensions (GSP) - Contract-based schemes

GPP and GSP arrangements are sponsored by the employer, but the legal contract is still between the individual and the pension provider. These two types of personal pensions are collective arrangements, made for the employees of a particular employer to participate on a group basis, and so typically obtain lower management fees than individual personal pension plans.

Overview of investment regulations

UK pension investment regulation is largely principles based. It does not explicitly mandate overseas investment, and neither does it prohibit it. There is, however, a requirement to ensure that investments are appropriately diversified, as well as a requirement that assets be invested mainly in regulated markets.

In order to provide a fuller context, a summary of the main investment regulations pertaining to UK pension schemes is provided below.

Summary of regulatory requirements

Responsibility for management of a trust-based pension scheme's assets lies with the scheme trustees. Trustees are subject to an overarching fiduciary duty to act in the best financial interests of the scheme members. As regards meeting that duty, regulatory guidance[3] focuses on the following aspects of the role:

- Setting the investment strategy
- Drawing up a Statement of Investment Principles (SIP)
- Making investments

Setting the investment strategy

The Pensions Act 1995 (the Act) gives trustees broad powers to invest as they deem appropriate, subject to a limitation on investment in the sponsoring employer and any restrictions that the scheme's own trust deed and rules may specify.

The Occupational Pension Scheme (Investment) Regulations 2005 requires that investment powers be exercised:

- in a manner to ensure the security, quality, liquidity and profitability of the fund;
- in a manner appropriate to the nature and duration of the expected future retirement benefits of the scheme;
- having regard to the need for diversification in the choice of investments for the scheme; and
- making sure that the scheme assets are invested mainly in regulated markets.[4]

No decision to make an investment should be made without first obtaining and considering proper advice.

In setting strategy, trustees are expected to consider the suitability of different asset classes to meet the needs of the scheme and future liabilities, as well as their risk and return characteristics and the need for diversification. The strategy is articulated in the SIP, which the Act requires trustees to draw up.

The Statement of Investment Principles

The guidance notes that:

"The SIP must include your policy on:

- choosing investments;
- the kinds of investments to be held, and the balance between different kinds of investment;
- risk, including how risk is to be measured and managed, and the expected return on investments;
- realising investments;
- the extent, if at all, you take account of social, environmental or ethical considerations when taking investment decisions; and
- using the rights (including voting rights) attached to investments if you have them.

3 www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/trustee-guidance; www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/db-investment

4 www.legislation.gov.uk/uksi/2005/3378/contents/made

Before the SIP is drawn up, you must:

- obtain and consider the written advice of a person who you reasonably believe to have the appropriate knowledge and experience of financial matters and investment management; and
- consult with the employer.

In this case, 'consultation' means considering the employer's views carefully. It does not mean that you have to agree with the employer or carry out their wishes. The law makes the point that you do not need the employer's agreement."[5]

The SIP must be reviewed at least every three years and whenever there is a significant change in investment policy.

Making investments

With regard to implementation of the investment policy, the guidance notes that:

"The trustee board has ultimate responsibility for the scheme's investments. However, in practice, the role played by trustees will generally be constrained by the Financial Services and Markets Act 2000 (FSMA)…

The FSMA requires that 'regulated activities' are only carried out by persons who are authorised or exempt. Most day-to-day investment activities carried out on behalf of an occupational pension scheme are regulated activities. In practice, this means these decisions will generally need to be delegated to an investment manager who is appropriately authorised under the FSMA."[6]

Trustees are required to ensure the suitability of fund managers to whom day-to-day responsibility is delegated, to monitor performance, and to ensure fees and charges are appropriate.

Trustees are also required to ensure that investments are held securely. In general, this is done through the appointment of a custodian.

Contract-based schemes

Contract-based schemes are subject to a different regulatory regime. Contract-based schemes are DC schemes, but involve an individual contract between the member and the pension provider (often an insurance company) rather than being sponsored by the employer, although employers may provide access to such schemes.

The principles underpinning the regulation of these schemes include the fair treatment of members, accurate and comprehensive communication, and providing value for money. The Independent Governance Committee (IGC) plays a key role in monitoring and reporting against the achievement of these goals.

5 www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/trustee-guidance; www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/db-investment

6. www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/trustee-guidance; www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/db-investment

Chapter Two: What is overseas investment?

This chapter provides an introduction to overseas investment by UK pension funds and a snapshot of current investment trends.

Changes in the pensions landscape have resulted in increased interest in global investment by pension schemes. The primary function of non-domestic investment is to expand the selection of potential investments from which to choose, hence providing access to a larger opportunity set and facilitating greater diversification. The proportion of overseas investment made by Defined Benefit (DB) schemes has increased over the past few decades, but will decrease over time for closed DB schemes. On the other hand, interest from Defined Contribution (DC) schemes in increasing, and global DC investment is likely to continue to increase as schemes grow in scale.

This research was supported by interviews with key professionals in the field of global investment. These interviews inform the narrative of the report. Interviewed organisations include pension schemes, asset managers, consultants, trade bodies and Government. Organisations included:

Aberdeen Standard Investments
BAE Systems
Brunel Group
Columbia Threadneedle Investments
The Financial Conduct Authority
Fidelity
Legal and General
Mallow Street
MFS Investment Management
NEST
Pension Protection Fund
The Pensions Regulator
The Investment Association
Prudential
Schroders
Systematica
The People's Pension

UK pension provision is a combination of State-provided, employer-related, and individual arrangements

UK State-provided pensions are administered through a compulsory, redistributive arrangement. A second tier of provision consists of a combination of employer-related and personal plans.[7]

In this report, we focus on employer-related pension plans, which represent the majority of pension assets and in which the practice of international investment is most developed. These plans fall into two main types: DB and DC.

The primary difference between DB and DC lies in whether it is the pension benefit that is fixed (as in DB) or the pension contribution (as in DC). Fluctuations in investment returns affect the element that is not fixed. Hence, in DB, investment volatility leads to variation in the required level of contribution while, in DC, it leads to variation in the benefit paid. So even though DC shares with DB the goal of providing lifetime income, investment does not need to be fitted to a specific benefit level: instead, the benefit adjusts to fit the investment outcome.

The pensions landscape has changed over the last few decades as a result of demographic, market, policy and regulatory shifts

DB pension schemes have long been, and continue to be, the main retirement vehicle for public sector workers. Historically, DB schemes were also the dominant form of pension provision for private sector workers, but this is no longer the case. In 1967 there were around 8 million active members in private sector DB.[8] By 2019, private sector DB membership had declined to around 1.1 million active members, with 89% of schemes closed to new members, and 56% closed to new accruals by existing members.[9]

DB scheme closures can be attributed to several factors, including the following:

- Changes in policy, regulation and accounting standards: Legislative changes (which were designed to protect members' rights and to make the risks of DB pensions more transparent), surplus limits, and changes to the way scheme liabilities are calculated have increased the cost and reduced the attractiveness to employers of providing DB pension schemes.
- Economic effects: Low bond yields resulting from the aftermath of the global financial crisis have increased the estimated value of liabilities. This has contributed to a shortfall between funding levels and estimated future costs.
- Increases in life expectancy: Pensioner members are living for longer and requiring pension payments for longer than originally anticipated.

Labour-market shifts that have led to fewer people spending most of their working life in a single job may have also diluted the rationale for offering private sector DB schemes. As DB schemes became less appealing for private sector employers, many turned to the less risky and less expensive DC model. As a result of this, and the introduction of automatic enrolment in 2012, the number of active savers in DC schemes has increased rapidly and has overtaken the number of active DB savers. In 2020 there were around 14.6 million active members in DC schemes compared to around 6.7 million active members in DB schemes, including the public sector.[10]

However, while the DC market is currently growing rapidly, DB schemes still hold the majority of assets under management in the UK. While it is difficult to obtain direct data on the total value of assets held by both DB and DC schemes, the point can be made by looking at the value of entitlements held by scheme members: In 2018, the value of entitlements among funded public sector DB schemes and private sector DB schemes was around £2.6 trillion, compared to the value of entitlements for those saving in DC schemes of £347 billion.[11]

7 For further detail regarding the UK pension system, see Appendix One and PPI's Pension Primer (2020)
8 Carrera et.al (PPI) (2012)
9 PPF (2020)
10 PPF (2020)
11 ONS (2021)

The UK regulatory context is generally favourable to a global investment approach

Even though today the Governments of most developed economies around the world are comfortable to allow the free flow of capital into and out of their countries, this has not always been so. In the case of the UK, the Exchange Control Act of 1947 (which superseded war-time restrictions on the movement of gold, currency and assets out of the country) acted as a particular hurdle to international investment. The abolition of the Act's exchange controls in 1979 was an early and key element of the wider deregulatory strategy of the Thatcher era and served as an important catalyst for a more global outlook among UK pension funds. Since then, the regulatory environment has been largely favourable towards global investment.

> **"UK regulatory guidance tends to emphasise the benefits of global investment rather than to create barriers." Regulator**

Schemes are encouraged to diversify their investments, with the Department of Work and Pensions, for example, explicitly guiding DC trustees to ensure that the default option's investment strategy should make use of "the appropriate and diversified allocation of assets."[12]

Another area of emphasis within DC regulatory guidance is the management of costs. This may discourage investment in certain types of asset.

There has been significant regulatory activity related to sustainability recently in the UK, as in many other countries. This may have some effect on approaches to investment and will be considered in more detail in chapter three.

The openness of UK financial markets has contributed to a thriving financial services sector. There is a large and well-established asset management community.

The combination of the UK's position as a global financial centre, large pension market, and history of freedom from regulatory restrictions means that there is considerable depth of institutional experience of non-domestic investment.

Overseas investment is a key element of investment strategy for both DB and DC schemes

A promise to pay a DB pension is a long-term commitment, reaching in some cases fifty years and more into the future. By setting aside money against that commitment (or "pre-funding") the risk is reduced that funds may not be available to make good on the pension promise when it becomes due. That is a particular concern in the case of private sector employers. For this reason, the majority of UK DB pension promises are funded in advance, with some exceptions, such as the pensions of UK central Government employees, which are paid out of tax revenue as they fall due. This in turn means that an investment programme is required.

In the case of DC, there is no benefit promise, only the contribution itself, so pre-funding is intrinsic to the structure.

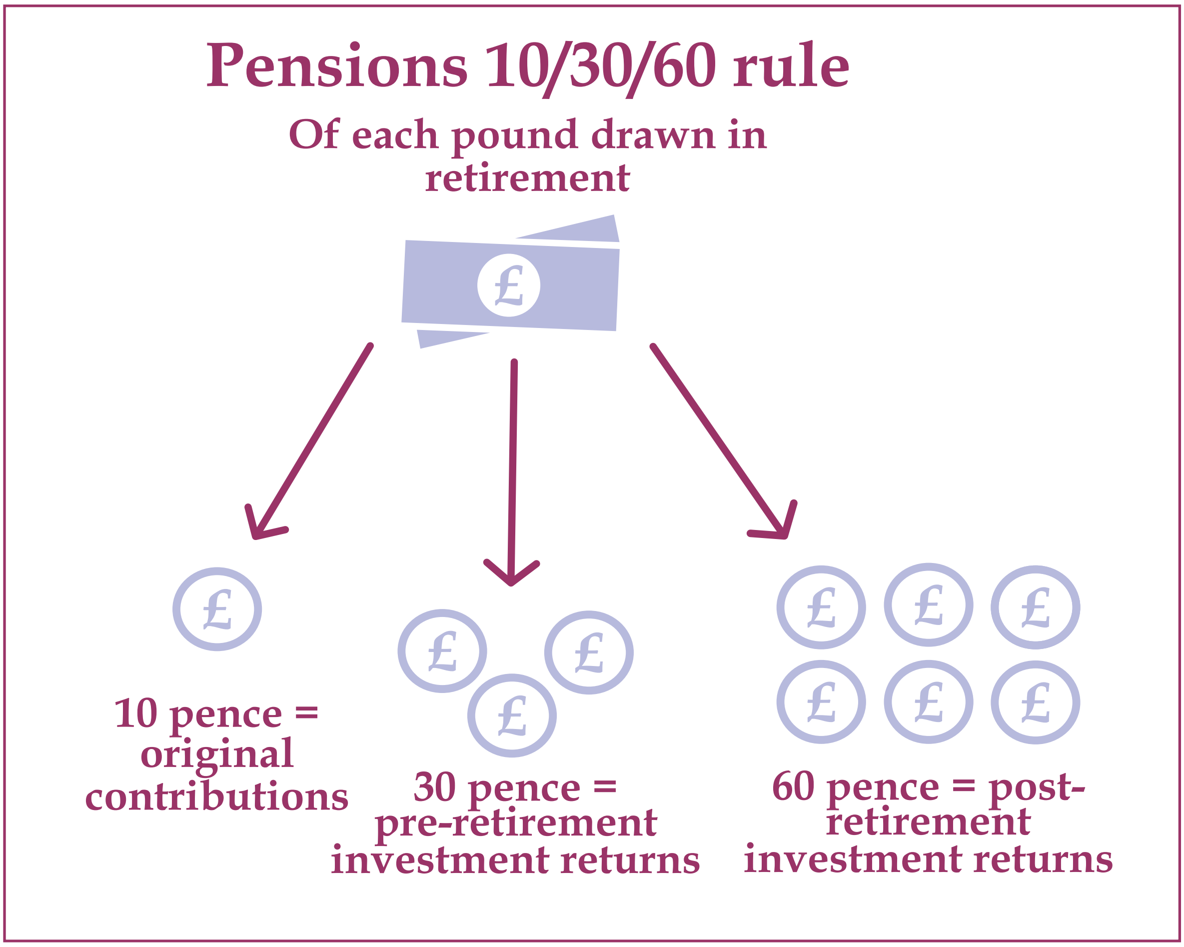
In both cases, the investment of the assets is essential to the cost-effectiveness of the system. For DB, if assets are effectively invested, pre-funding can substantially reduce the cost of meeting the commitment. For DC, the amount of pension that is paid is directly linked to the success of the investment programme.

Given the decades-long time scale over which investment occurs, investment returns typically make up the great majority of the benefits paid: in one representative example, known as the 10/30/60 rule, it has been estimated that of each pound drawn down in retirement, little more than 10 pence represented the original contributions, while almost 90 pence represented investment earnings accrued (roughly 30 pence accrued prior to retirement, and almost 60 pence post retirement) (Figure 2.1).[13] Clearly this is only a broad rule of thumb, and different results are obtained if the assumptions used in the analysis are changed (with the level of investment return being the most important of these). The conclusion that the great majority of benefits come from investment returns rather than contributions is, however, robust under a wide range of different assumptions.

12 DWP (2011)

13 Ezra et. Al. (2009) p. 44

Figure 2.1[14]



For this reason, a well-functioning investment programme is fundamental to the cost effectiveness of a pension system.

Where investment programmes are small, it is natural to look to domestic markets. These are the most familiar and the easiest to access. However, the global capital markets exceed any single domestic market in size, diversification and breadth of opportunity. As a result, institutional investment has become an essentially global activity.

The primary function of non-domestic investment is to provide access to a broader range of potential investment choices

Overseas investment brings several potential benefits:

- A larger range of assets and a more balanced mix of sector exposures than is possible within any single domestic market. Reduced concentration serves to reduce the volatility of investment returns and also to reduce downside risk. The value of diversification is especially relevant from a UK perspective, since the UK's pension assets are large relative to the UK share of global GDP and global stock market value.
- International investment also gives access to economies, asset classes and sectors that may be limited or not available at all in the domestic market. A UK investor may invest internationally in order to benefit, for example, from the growth of emerging market economies or the returns available from global infrastructure, the US corporate credit market or sectors such as technology that are underrepresented in the UK market.
- There is a wider opportunity set for active management, increasing the potential upside to be gained from skilful security selection.

14 Ezra et. Al. (2009) p. 44, Example based on a 25-year-old who saves a level percentage of an increasing payroll stream and earns a uniform annual return until retirement at age 65. Participant starts to draw down an inflation-linked annual amount from age 65 and calculated to exhaust savings by death at age 90. Assumptions: Annual inflation at 3%; pay increases at 4.75%; investment returns at 7.5%.

- There is also increased scope for the dynamic management of exposures to vary the asset mix in response to favourable or unfavourable market conditions.
- To the extent that the investor pursues ESG objectives, the opportunities to gain the desired exposures and to create the desired impact are expanded. The range of possible objectives that might be pursued is very broad and will reflect the nature and high-level purpose of the investment organisation. In practice, the most common objectives relate to environmental goals such as climate change, pollution and social goals such as human rights and the alleviation of poverty.

These advantages were widely recognised among those interviewed for this report, although the degree of emphasis placed on the various benefits differed, reflecting differences in the investment approaches that they follow.

Alongside these benefits, there are several challenges associated with non-domestic investment in the form of risks and practical impediments that are discussed further during the report. The rest of this chapter sets out how global asset investing has been approached in the UK.

A domestic bias generally results in greater concentration of risk

The U.S. stock market, for example, is by some distance the world's largest, yet even this market displays a significant imbalance: as of January 2021, over 20% of the total capitalisation of the S&P 500 index (and around 15% of the total U.S. stock market capitalisation) was represented by just five stocks: Microsoft, Apple, Amazon, Alphabet, and Facebook. Since these are all part of the technology sector, the performance of these five companies tends to be highly correlated.

Concentration is an even bigger issue for other markets that are not as large at the U.S. In the UK, the largest five stocks represent close to 20% of the total market value.[15] Even though UK stocks in aggregate derive an unusually high proportion of their earnings from overseas (reflecting the UK's position as a global financial centre), the market is concentrated in a small number of sectors - notably pharmaceuticals, financial services, and oil and gas. Information technology is barely represented at all in the UK market.[16] Similar issues arise in fixed income markets, with a relatively undeveloped domestic credit market dominated by a narrow range of issuers.

The proportion of equities that DB schemes invest overseas has increased over time

The share of DB equity investment that is allocated to the UK market has fallen steadily over the period shown, continuing a trend that dates back some forty years (Figure 2.2). Over this period, global capital markets have become more integrated, property rights have become clearer, and concerns about potential appropriation have receded. Increasingly, the whole global equity market has become seen as being the opportunity set, with UK and non-UK companies treated as being equally suitable for the portfolio. As the UK equity allocation has fallen, there has been a corresponding increase in overseas equities and, more recently, in unquoted/private equity - of which a significant share is invested outside the UK.

> ***"From the 1990s onwards there has been a gradual move towards international. No one could explain the domestic bias; there was no logic to it." - Asset manager***

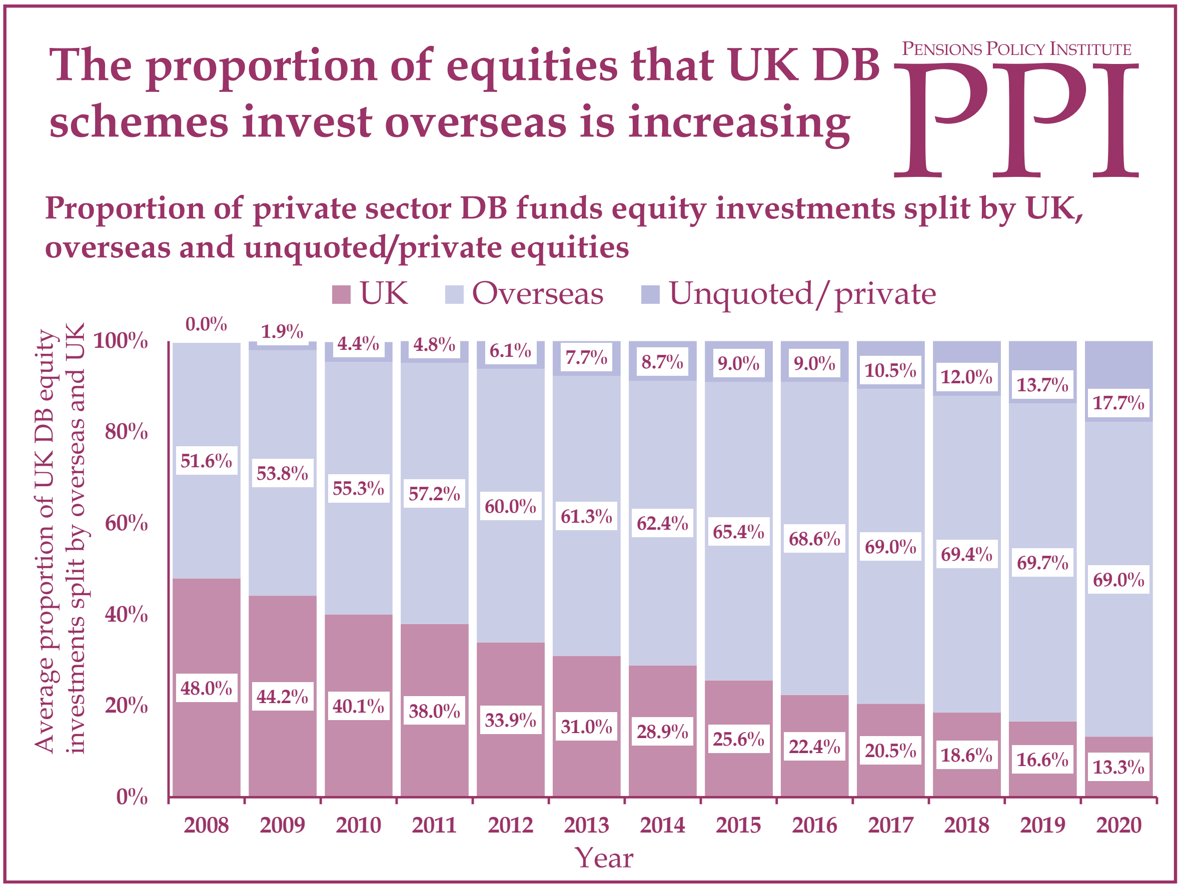
As the approach to the equity market has become more global, the typical management structure has also evolved. When UK pension funds first invested internationally, the available expertise was largely regionally focused, so the management of Europe (ex-UK), US, Japan and Asia ex-Japan assets tended to be approached separately - with emerging markets another separate sleeve added later. Over time, truly global players have emerged, making an integrated global approach more attractive. The legacy of the regional approach to equities is still visible in many UK fund structures.[17]

15 FTSE Russell

16 FTSE Russell

17 Qualitative interviews

Figure 2.2[18]



As DB schemes mature, they invest more in domestic bonds

This increase in the use of global investments within the equity portfolio is taking place within the context of a declining allocation to equities among DB schemes. This is related to the closure of schemes and the freezing of benefit accruals that we have described.

The closer DB schemes come to their end date, (i.e., the date when their last surviving beneficiary dies, and they will have no remaining liabilities) the greater the need for investments which provide known cash flows. This is because, as the end date draws closer, (a) new benefit accruals cease and time horizons shorten, hence the required outgoings from the scheme become more clearly known, and (b) new contributions fall. This makes a closer match between the assets and the liabilities of the scheme more important, as well as more feasible - and the need for return-seeking investments becomes outweighed by the need to ensure cash flows match the required benefit payments.

In most cases, the required cash flows are partially indexed to price inflation, so the assets most closely matching these are a combination of fixed and index-linked (i.e., inflation-linked) gilts issued by the UK Government, and sterling-denominated corporate bonds. Though some schemes may invest a small proportion of assets into overseas bonds, these are unlikely to ever form a significant proportion of inflation-linked investments - as price inflation in other countries will never mirror the UK's completely.

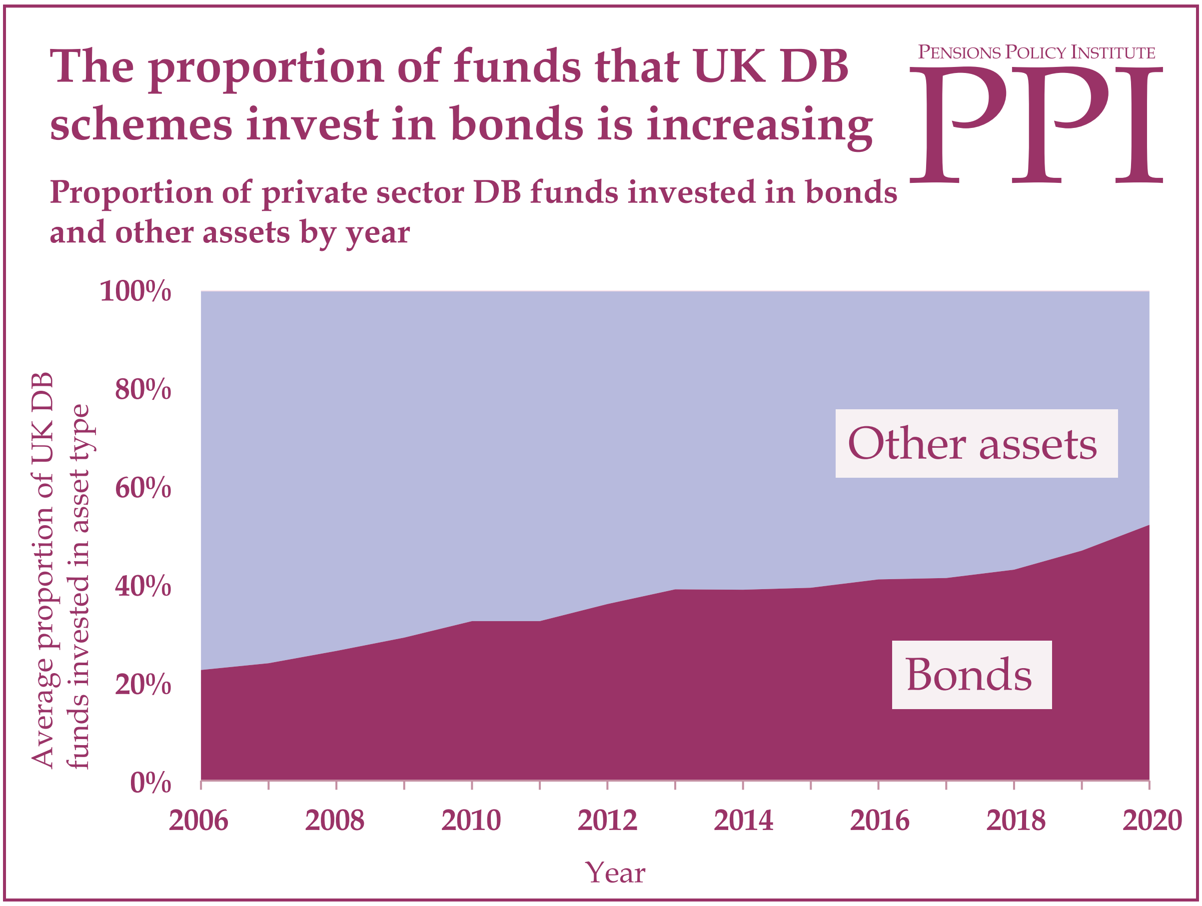
The trend for DB schemes to shift investment into liability-matching assets is illustrated by the increase in average proportion of assets invested in bonds[19] growing from 23% in 2006 to 52% in 2020.[20] This growth has followed a steady trajectory since 2006, which implies that - even though the approach to equity investment is now global - the proportion of total DB funds invested globally will decline as more funds are invested in domestic bonds and gilts (Figure 2.3).

18 PPF (2020) p. 39, figure 7.5

19 By private sector DB schemes

20 PPF (2020) p. 37, figure 7.3

Figure 2.3[21]



Hence, the approach to domestic vs. overseas investment varies across different types of asset. Even though the approach to equity investing is essentially global across DB and much of DC, this equal treatment of UK and overseas assets within the equity portfolio is not extended to all other asset classes. Property, long-term debt, and cash holdings are dominated by domestic investments (Figure 2.4).

The most important of these are long-term debt instruments, specifically the domestic bonds and gilts which have become the main investment for DB plans as a whole. In some cases where long-term debt is held primarily for purposes of investment growth, a higher proportion may be invested overseas. Where emerging market debt is held, for example, higher default risk and higher yields mean that this is generally regarded as a growth asset, and invested either through a stand-alone portfolio or as part of a diversified growth portfolio.[22]

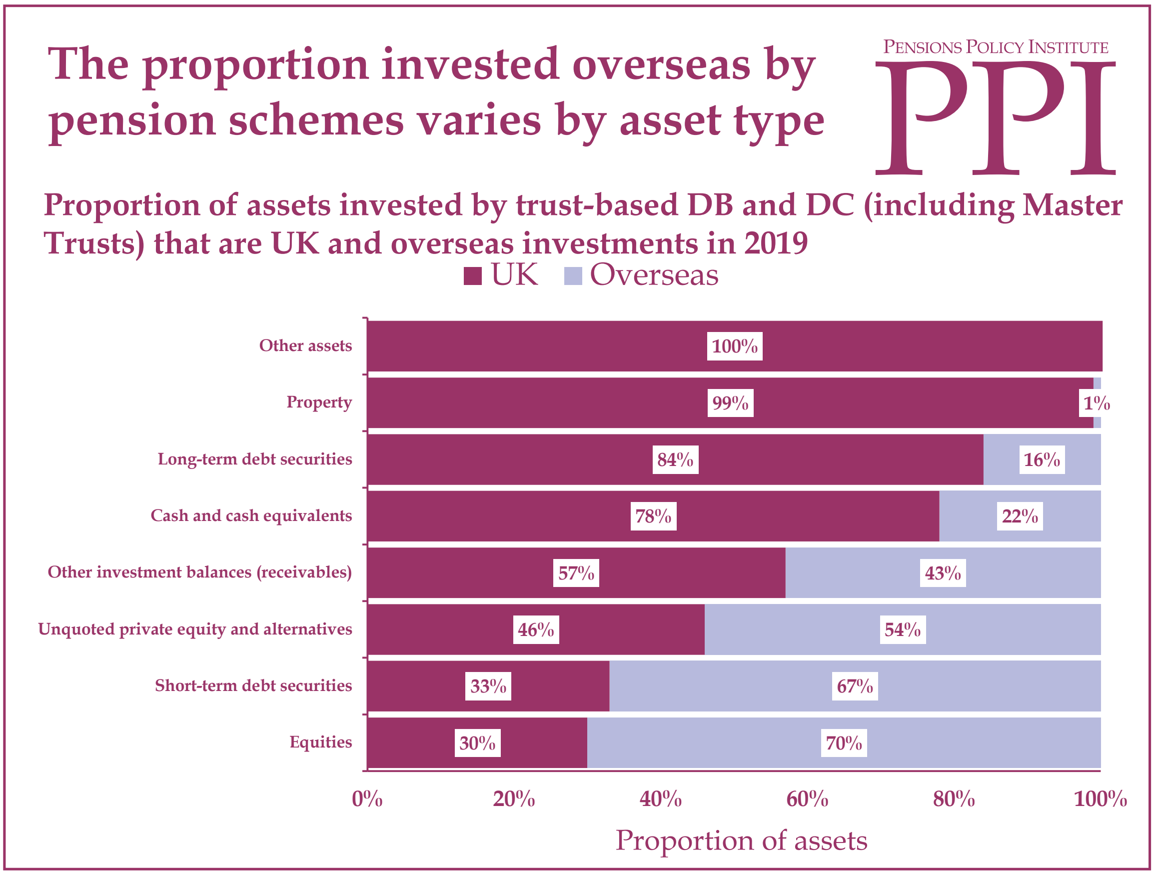
The global property investment market has not developed into a global market to the same extent as equity and debt markets.[23] As a result, implementation is still largely through local players. Most other alternative asset classes are treated as global opportunity sets, but in practice tend to be more concentrated in their country/regional exposures than listed markets are.

21 PPF (2020) p. 37, figure 7.3

22 Qualitative interviews

23 ONS (2020) figure 23

Figure 2.4[24]



The expansion into alternative asset classes has naturally supported increased investment in overseas assets

The primary focus of UK pension schemes has long been the well-established markets of listed equities and bonds that offer the greatest liquidity and ease of access. However, as is true for many large institutional investors around the world, there has been a growing willingness to move beyond the most liquid markets into various alternative assets, including: private equity, private debt, property, infrastructure, forestry, commodities and other more esoteric areas.[25]

> *"Many pension funds realise that they don't need as much liquidity as they thought – more recent moves have been into private debt." - Asset manager*

There has been a parallel, long-term trend among corporations away from public listing. This is especially evident in the U.S. and UK, where growing enterprises have traditionally relied heavily on stock markets in order to raise capital. Today, however, a greater proportion of capital is raised through private funding, with companies delaying public listing for longer. One study found that while an average of 310 companies per year went public[26] in the U.S. from 1980-2000, that figure dropped to below 100 a year in the subsequent decade. In the mid-1990s there were more than 8,000 publicly-listed companies in the U.S., but fewer than 4,500 today.[27]

24 ONS (2020) figure 23

25 PPF (2020) p. 39, figure 7.5

26 Ritter et al (2013)

27 https://data.worldbank.org/indicator/CM.MKT.LDOM.NO?locations=US

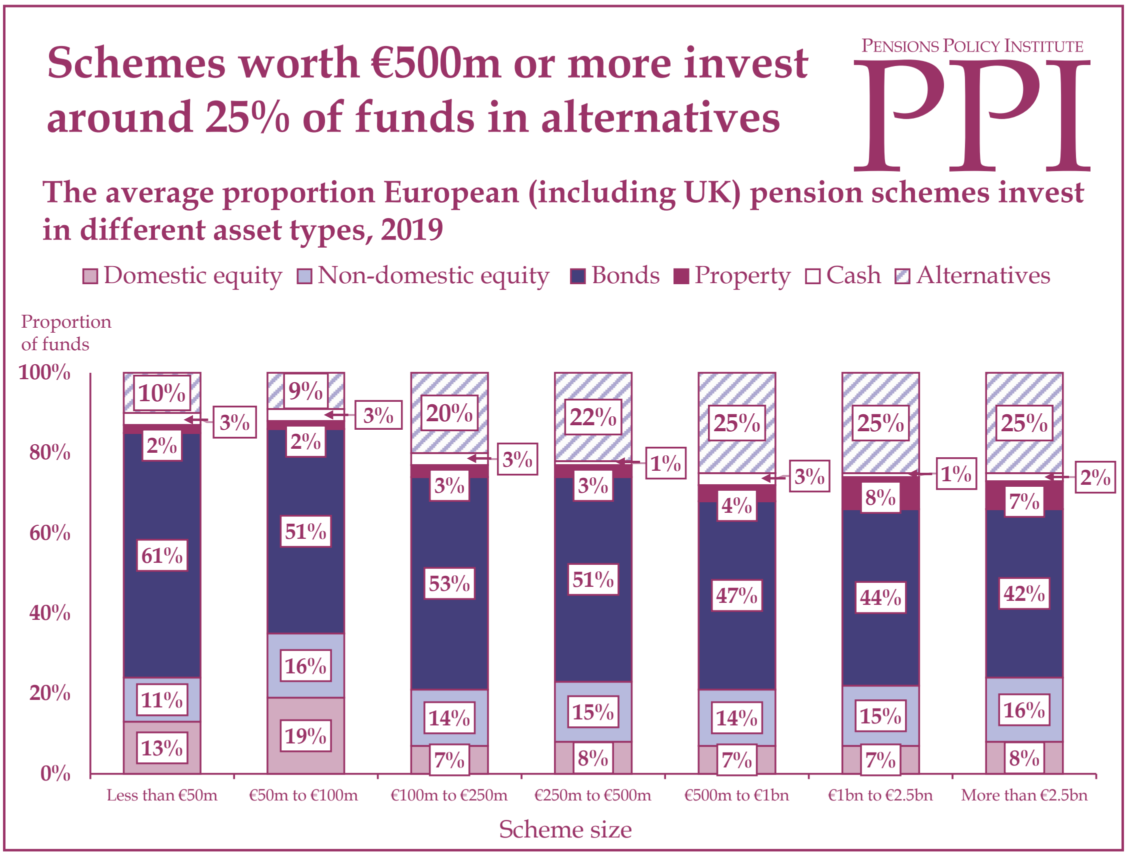
Illiquid investments are appropriate for some, but not all DB schemes

Not all schemes have moved in this direction, however. In general, small and mid-sized schemes have been less likely to invest in illiquid assets. This is largely because of the resource commitment that is needed to oversee this area and because building a diversified portfolio of illiquid assets generally requires greater scale.

Even where there is adequate scale, illiquid assets are a less good fit for the most mature DB schemes, i.e., those with a large proportion of participants who have reached retirement age. This is the result of these schemes having a shorter time horizon and a greater need for income in order to pay benefits, as well as the focus on liability-matching fixed income investments among more mature schemes.

In other cases, however, illiquid alternatives assets have become a material part of the investment strategy. Within Europe, the larger pension funds (i.e., those worth more than €100m) invest between 20% and 25% of their total assets in "alternative assets", which is generally made up of illiquids and more complex assets (Figure 2.5).

Figure 2.5[28]



A small number of leading DC schemes have likewise started to diversify into alternative assets in order to broaden the reach of their investment programmes. The investment policy of the NEST master trust, for example, permits up to 20% exposure in illiquid assets.[29] This approach is less widespread among DC schemes than DB, however. Reasons for this include the administrative challenges posed by illiquid assets in administering account values at the individual participant level and the higher cost associated with illiquid assets.

28 Mercer (2020)

29 www.ft.com/content/09f706bb-fdae-464e-9d87-e1d4ff6573bf

Illiquid asset investments are generally approached globally

Because they are held for diversification and growth purposes, a global perspective is generally applied to investment in illiquid and alternative assets. However, in practice, the opportunity set associated with each type of investment may be quite different, and none match the breadth of global exposure offered by the listed equity and fixed income markets. Global high yield corporate debt, for example, is dominated by U.S. issuers, who represent over half of the total global private debt market.[30]

> *"Alternative asset class exposures tend to be global. These are seen as a natural extension of a diversification programme, following the initial move from the UK to global." - Regulator*

Unlike many alternative assets, real estate has been a feature of UK pension investment for several decades. For many years, this was a purely domestic asset class, because legal and other administrative barriers effectively precluded the possibility of international investment. In time, these barriers have been overcome for major markets, and it is now possible for non-domestic investors to access real estate markets in several countries across Asia, Europe and North America. It remains the case, however, that local expertise is required in each market. Some schemes choose to approach non-domestic property indirectly (via pooled vehicles) even where domestic holdings are directly owned.

The National Employment Savings Trust (NEST) provides an example of how a large pension scheme approaches global diversification into illiquid investments (Case Study 1).

Case Study 1[31]

The Nest Master Trust was set up by the Government in 2010 as part of the rollout of automatic enrolment, to ensure that every employer has access to a workplace pension scheme. By 2017 it served 500,000 employers (most of them small) and over 4 million members.

Because the scheme is young and growing fast, it has a long investment time horizon, and seeks a well-diversified investment programme. This includes not only global equities and debt, but also global alternative and private market investments. In 2019 it introduced allocations to global real estate debt and global infrastructure debt, and in 2020 further increased the exposure to illiquid markets with an allocation to private credit. Practical considerations, including cost, can restrict DC schemes' freedom to invest in illiquid assets, and CIO Mark Fawcett notes that "as we get larger, the constraints that often come with DC will be less of an issue. But we still need to work with the asset-management industry to access these alternative classes in ways that are cost effective."

30 www.blackrock.com/hk/en/literature/fact-sheet/bgf-global-high-yield-bond-fund-class-c2-usd-factsheet-lu0331284447-hk-en-retail.pdf

31 www.nestpensions.org.uk/schemeweb/nest/nestcorporation/news-press-and-policy/press-releases/Nest-puts-private-markets-in-the-hands-of-its-savers.html; www.top1000funds.com/2017/05/looking-for-illiquidity/; www.ft.com/content/09f706bb-fdae-464e-9d87-e1d4ff6573bf

Global investing reflects a balance between potential risks, potential return, and consideration of practical implementation factors

Beliefs about risk and return trade-offs are reflected in a scheme's strategic asset allocation plan

For both DB and DC arrangements, the primary means by which the overall balance is managed lies in the choice of strategic asset allocation. This is often summarised as the preferred balance between assets chosen mainly for return enhancement and assets chosen mainly for risk management. Hence, a "40/60" portfolio, for example, would refer to an allocation of 40% to growth assets (such as equities and growth-focused alternatives) and 60% to assets (such as fixed income assets) held either to match liabilities or to reduce the volatility of portfolio returns. This shorthand remains widespread, although it is a simplification of the decision structure behind most institutional portfolios which will involve many factors beyond risk and return.

Once this overall risk balance has been set, several more allocation decisions follow, with the allocation between domestic and non-domestic markets being among the most important.

Within UK DB schemes, the majority of return-seeking investments are already global; within DC schemes, the trend for global investments in growing

For UK DB pension schemes, the objective of return enhancement is generally approached from a global perspective. The proportion of the total assets that is focused on this objective has, however, started to decline in recent years as schemes have matured, resulting in a greater focus on risk management and, specifically, on liability matching.

For DC schemes, the objective of return enhancement is dominant and is likely to remain so for the immediate future. As a result, the strategic asset allocation of DC schemes on average differs from that of DB schemes. International allocations have grown and are likely to continue to do so as this segment develops.

Decisions about whether to invest non-domestically, how much, and in which types of instrument, represent a balance between risk, return and practical considerations which will be explored in more depth in chapter three.

Chapter Three: What trade-offs need to be considered in overseas investment?

This chapter explores the main challenges and trade-offs which need to be considered, including currency risk, Defined Benefit (DB) scheme liability matching needs, the role of governance arrangements, and the need to consider sustainability, responsibility and ESG factors.

There are several challenges and trade-offs associated with investing globally. Currency risk is a significant concern for global investors, though there are market mechanics for hedging this. DB schemes who wish to match liabilities generally find domestic investments fit this objective better. Decision-making structures influence investment strategy, including the approach to international investment, for both DB and Defined Contribution (DC) schemes. The availability of reliable ESG data varies significantly between markets. Even with the development of global reporting standards, it is likely that greater transparency will continue to be a challenge for investors in some markets for some time.

UK pension liabilities are denominated in sterling, so investment in assets denominated in other currencies introduces a currency mismatch

For both DB and DC, UK plan investment objectives are framed in sterling. Currency risk is given close attention, not only because it can lead to significant volatility in asset values, but also because it is possible to isolate and manage. This is done through the use of forward currency contracts, as illustrated below.

Example of currency hedging:

- A UK investor buys an asset that is expected to generate an income of US$100 a year for the next three years.
- At the same time, the investor enters agreements (known as forward currency contracts) to convert that income into pounds sterling as it is received. The conversion rates are specified at the time the contract is entered into. They are typically not exactly equal to current exchange rates and depend on market expectations of exchange rate movements. Those expectations in turn are closely linked to interest rates in each country. Hence, if the current exchange rate is £1: $1.35, the one-, two- and three-year forward agreements may be based on exchange rates of $1.352, $1.354 and $1.357 respectively.
- By locking in the rates at which the future currency trades will be made, the UK investor's income is no longer subject to fluctuations in the sterling-to-dollar exchange rate. The net proceeds will be £73.96 (i.e., 100/1.352) after one year, £73.86 after two and £73.69 after three. Those proceeds will not depend on how the actual exchange rate moves (Figure 3.1).

Figure 3.1

Currency hedging is particularly suited to fixed income investments

A U.S. Treasury bond, for example, provides a known future income stream, consisting of fixed coupon payments twice a year until the bond's maturity date, and a further capital sum at that point. Similar fixed income instruments are issued by a wide range of Governments, corporations, and other bodies. Without currency hedging, exchange rate fluctuations create uncertainty in the proceeds from fixed income assets issued in foreign currencies. By mitigating that uncertainty, a hedging programme increases the attractiveness of these assets.

Currency hedging of non-domestic developed market fixed income holdings is therefore common, particularly among larger DB schemes and those that are most focused on liability matching.

Some global assets may not be suitable for currency hedging

Not all foreign currency exposures can be managed this way. Forward currency contracts are widely available in major currencies, but more limited for others. This means that it is impractical to hedge the currency exposure of an emerging market debt portfolio, for example.

In the case of equities, the relationship to currency is less straightforward than for fixed income. Most large companies derive at least part of their earnings and incur at least part of their costs outside the country in which their stock is listed. Hence, the true relationship between share price performance and exchange rates can be opaque. Unlike fixed income holdings, the projected income from the asset is unknown and variable even when expressed in the base currency. Also, unlike fixed income holdings, equities are not held as liability matching assets. For these reasons, most UK investors do not choose to hedge foreign exchange exposure of non-domestic equity holdings, and those who do typically do so only partially, with a 50% hedge ratio being a common choice. Therefore, currency risk is retained within international equity portfolios more widely than within fixed-income investments.

Similar considerations apply in alternative asset classes, and currency hedging is likewise less common for those investments.

Domestic investments tend to work better for DB liability matching

DB pension funds exist in order to meet specific liabilities. When a fund is first established, benefit payments are small or non-existent, and there are significant inflows as liabilities accrue and contributions are made. During this initial growth phase, liability considerations do not greatly impact investment strategy, since accumulated assets (and hence investment risk) are small in relation to expected future contributions. As a fund matures, however, risk is given more attention. In particular, the movement of asset values relative to the value of the fund's liabilities is closely monitored.

As private sector DB schemes close, the bias towards domestic investment is likely to increase

The focus on liability matching becomes stronger when a scheme closes to new entrants, since this means that the time horizon of the scheme is no longer indefinite. When a scheme closes to new entrants, existing members typically continue to accrue new benefits, so the dynamics of the scheme may initially remain similar to before. However, these dynamics change over time. A key point in the maturing of a closed pension scheme is when new benefits no longer accrue: this may happen either through a decision to freeze accruals, or, over a longer period, as a result of scheme participants retiring or transferring out of the scheme.

Once new benefit accruals have frozen, the nature of the scheme's balance sheet changes and, with it, the investment strategy: there is now a focus on an end game of full matching of assets to liabilities. This drives a transition from risk assets (i.e. assets focused on growth potential) to fixed income instruments. The target position is one of an asset portfolio that generates the same cash flows as those on the liability side of the balance sheet.

The effect of a maturing membership on a pension system

A pension system's balance sheet has both an accrued component and a future service component. The future service component consists of liabilities that have not yet accrued and future contributions that will be made by the sponsoring entity. The relative size of the accrued and future service components, which is related to the maturity of the system, is a major determinant of the system's ability to absorb investment risk.

For example, in a very young system, the existing assets are small in relation to the future contributions that are expected to be made as members accrue benefits and as new members join. As a result, even substantial variation in investment performance may have only a small effect on required contribution rates, since the variation is being spread across a larger contribution base. The long investment time horizon also means that a young system may be able to invest in less liquid assets, since the asset portfolio is growing and assets do not need to be sold in order to make benefit payments.

As the accrued component of the balance sheet grows relative to the future service component, so any variation in investment performance has a greater effect on required contributions and the liquidity of the asset portfolio requires greater consideration.

For a mature system in which there are no new benefit accruals (as is the case for a frozen DB scheme, for example), no future contributions might be planned - provided the system is fully funded. In this case, any underperformance in the asset portfolio would create a shortfall and require a special contribution. As a result, the tolerance for investment risk is generally much lower in a mature system than a young system. Similarly, the need for cash to be generated from the portfolio in order to meet benefit payments means that the liquidity must be closely monitored.

This process has become a major feature of UK DB pension investment over the past twenty years, as most UK DB plans have closed to new members and around half have frozen new benefit accruals.

As liability matching becomes more widespread, the proportion of assets focused on growing returns falls, and hence international investment will decline. This reverses the trend of the past forty years, which saw schemes seek ever wider diversification of market exposures in an effort to enhance returns and to spread risks as widely as possible.[32] In all probability, the incidence of international investment among UK DB schemes has now peaked.

Liability matching considerations do not currently act as a constraint on overseas investment by DC schemes

As DB provision has reduced, DC provision has been taking its place. And, while DB investment can be characterised as increasingly mature, DC is largely still in a growth stage.

Because DC benefits adjust to fit the investment income, investment does not need to be fitted to a specific benefit level. As a result, even as the DC system matures, liability matching will have less influence on investment decisions. Indeed, to the extent that – in a globally integrated economy – an individual's living expenses are shaped by non-domestic factors, it can be argued that the role of global investment should be stronger in a DC context.

Decision-making structures influence investment strategy, including the approach to international investment, for both DB and DC schemes

In this section, we consider the international allocation decision in the context of wider investment governance structure of the organisation. This is important not only in order to understand how decisions are arrived at, but also because the oversight structure can itself be a barrier (or an enabler) to effective decision making.

32 www.aberdeenstandard.com/en/insights-thinking-aloud/article-page/diversification-4

In DB schemes, the approach to global investing is generally captured in the strategic asset allocation policy

In DB schemes, the trustee body is responsible for high-level policy, including the chosen balance between return and risk. This is typically captured in the form of a strategic asset allocation policy. That policy, in turn, might be linked to associated market indices, creating a baseline position for the assets. Setting the strategic asset allocation policy is regarded as one of the most important decisions that a scheme makes, and specialist advice is generally sought as part of the process. The policy will typically be reviewed on a one- or three-year cycle.

This structure has the benefit of a clear starting point for those responsible for implementing the investment programme. Their perceived success or failure is closely tied to performance relative to well-defined benchmarks. The primary criticisms of the approach are that it narrows the investment opportunity set and is not sufficiently dynamic in responding to changes in the market environment.

Larger schemes may use many different specialised asset managers for global investing

Within the overall framework set by the strategic policy benchmark, day-to-day management responsibility is delegated to one or more investment managers. Smaller schemes may appoint a single asset management organisation to manage the whole portfolio. Larger schemes will use a range of organisations, seeking out specialist expertise in specific asset classes: for example, the equity assets might be divided between two different organisations and the fixed income portfolio managed by a third. The larger the scheme, the greater the number of managers that might be appointed and the greater the degree of specialisation that might be used. Some schemes manage some or all of the assets in-house, an approach which can offer greater customisation and cost effectiveness for the largest schemes, although requiring significant organisational commitment.

The basic division between domestic and non-domestic assets is determined by the strategic asset allocation policy, but the implementation of that policy is different under each of the various structures outlined above.

For example, where a single organisation is responsible for assets across a number of markets, that organisation is able to vary the allocation according to the perceived attractiveness of each market at any point in time. Under such a multi-asset approach, the investment manager has greater flexibility to vary the size and composition of the non-domestic portfolio than is possible when segments are each managed by separate organisations. This approach can be especially valuable during times of market disruption, for example. This tactical variation is more complex to achieve when the portfolio is divided between several asset management organisations.

It is not only the complexity of the portfolio management arrangements that varies with the size of the scheme, but also the internal resources that are available to oversee those arrangements. For example, most large schemes appoint an investment committee to which the trustee board is able to delegate many oversight tasks.

As an example of this flexibility, the asset management firm Aberdeen Standard Investments outlines how a strategic asset allocation may integrate ESG factors (Case Study 2).

Case Study 2[33]

Strategic asset allocation (SAA) uses sophisticated modelling of long-term market behaviour in order to determine a high-level allocation between the major categories of asset.

Investors have come to see ESG factors – such as aging populations, income inequality, and climate change – as increasingly important in market behaviour. Aberdeen Standard Investments have carried out analysis of the implications for the likely returns of these factors from all types of investment. This analysis has led to substantial changes in strategic allocation between, and within, asset classes. They expect these factors to become even more significant in future.

This analysis considers not only the effect of ESG factors on asset class behaviour, but also how strategic asset allocation decisions shape the ESG impact of a portfolio. In particular, SAA is seen as being able to direct private capital to where it is most needed, including playing a critical role in financing the transition to a low-carbon economy.

Considerations of cost and practicality can be material for DC schemes

As with DB schemes, DC schemes also generally first set the proportion of default strategy assets that are to be return-seeking and then make decisions about whether to invest these domestically or globally.

In a DC arrangement, investment returns directly impact the benefit received by the plan participant. For this reason, it is normal to give to the participant the right to direct the allocation of their own investments, in order to select a balance between risk and return that best fits their own circumstances and preferences. However, the majority of participants do not choose to exercise this right. Thus, most assets are invested according to the scheme's pre-set default allocation. Default allocations generally place the majority of assets into equities and other growth assets when participants are young, gradually moving to less risky assets as participants age. Allocations that vary according to age in this way are referred to as glide paths.

Just as with a DB plan, strategies that are primarily focused on the generation of returns tend to adopt a more global approach than strategies focused on risk mitigation. However, DC investment arrangements have not always received the same level of focus as DB. Some schemes – especially smaller ones – are still less globally diversified than they might be.

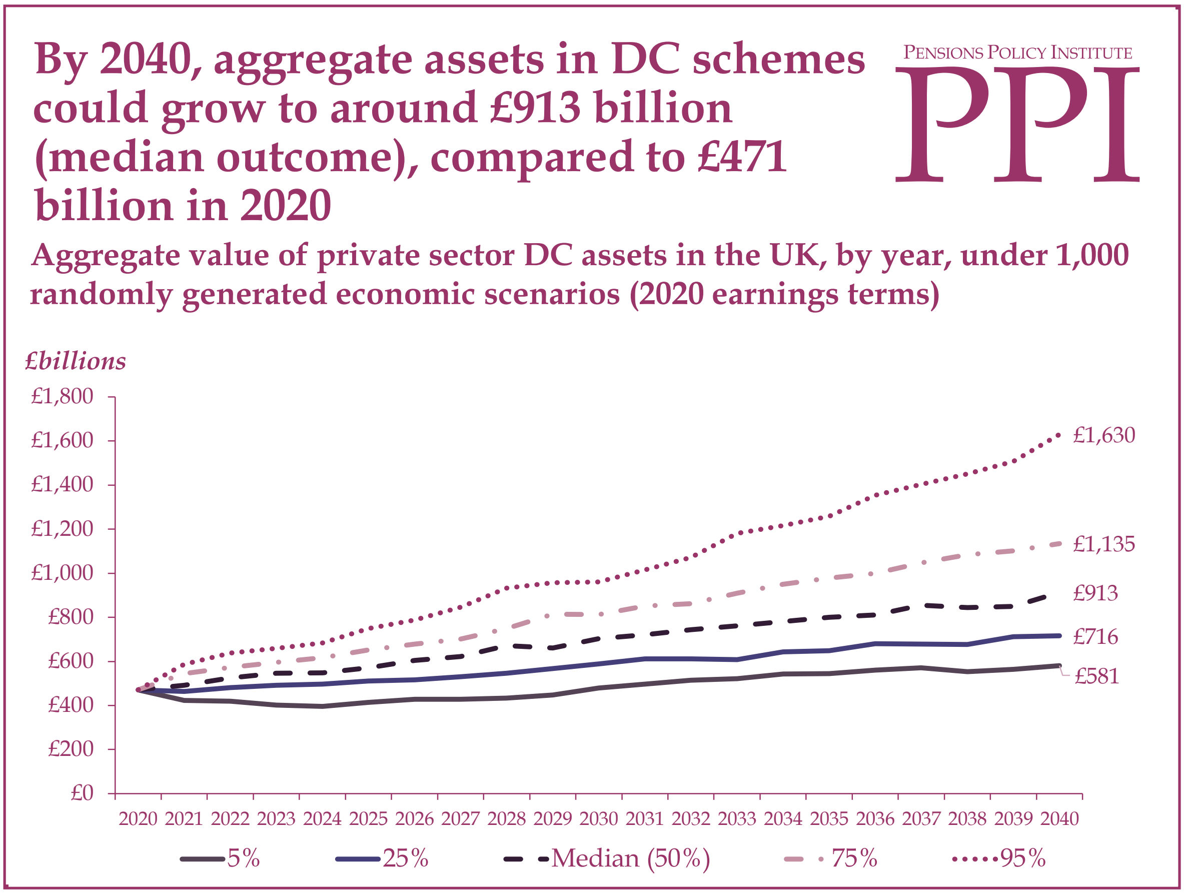
As the DC sector grows, more attention is being paid to investment decisions. Management fees and other charges that are borne by members have been an area of particular focus. At the same time, as scale increases and the sector develops, greater sophistication is being applied in the design of investment strategies - and these trends are likely to continue as DC schemes grow.

The value of assets in DC schemes could double in earnings terms over the next 20 years

Assuming that current trends continue, the aggregate value of private sector workplace DC assets could grow from around £471 billion in 2020 to around £913 billion in 2040 (using 2020 earnings terms). The aggregate value of assets is sensitive to economic performance. If the market performs very poorly, DC assets could stagnate, reaching around £581 billion by 2040. In a very positive market performance scenario, DC assets could grow to around £1,630bn by 2040 (Figure 3.2).

33 www.aberdeenstandard.com/docs?editionId=831104c8-8228-49fd-82f5-7c6a39e07727

Figure 3.2[34]



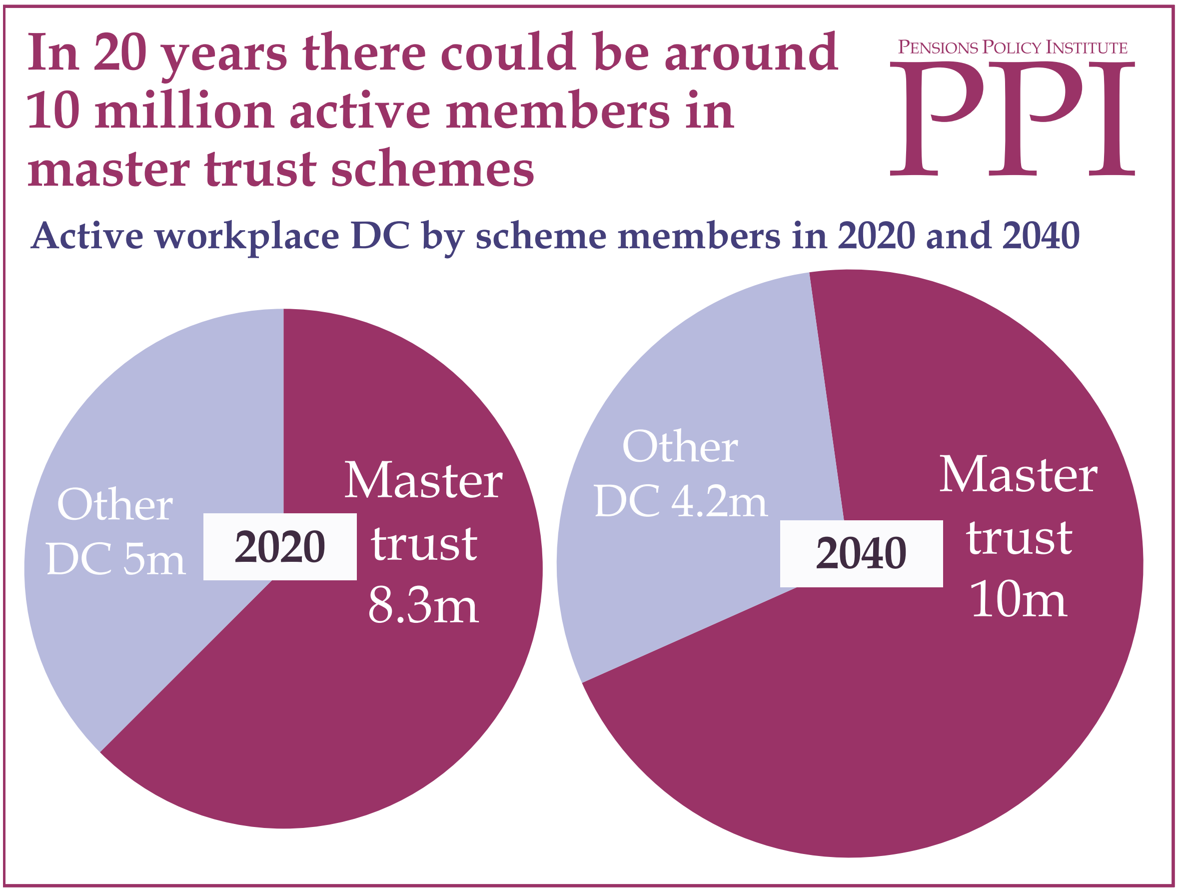
The UK DC market is consolidating with the emergence of master trusts

Master trusts consolidate the pension schemes of multiple employers into a single arrangement. In doing this, they build greater scale and bring benefits in cost and professionalism. Although master trusts have existed in the UK for many years, they have moved from being a niche to a significant part of the DC landscape in the past decade as a result of automatic enrolment. In 2020, there were 8.3 million active savers (out of 13.2 million active DC savers) in UK master trust schemes, which could grow to around 10 million active savers (out of 14.1 million active DC savers) in 2040 (Figure 3.3).[35] Decision-making at master trusts is typically more formally structured than is the case at most single-employer DC schemes.

34 PPI Modelling

35 PPI Modelling

Figure 3.3[36]



Sustainability, responsibility and the financial implications of ESG factors have become increasingly important considerations

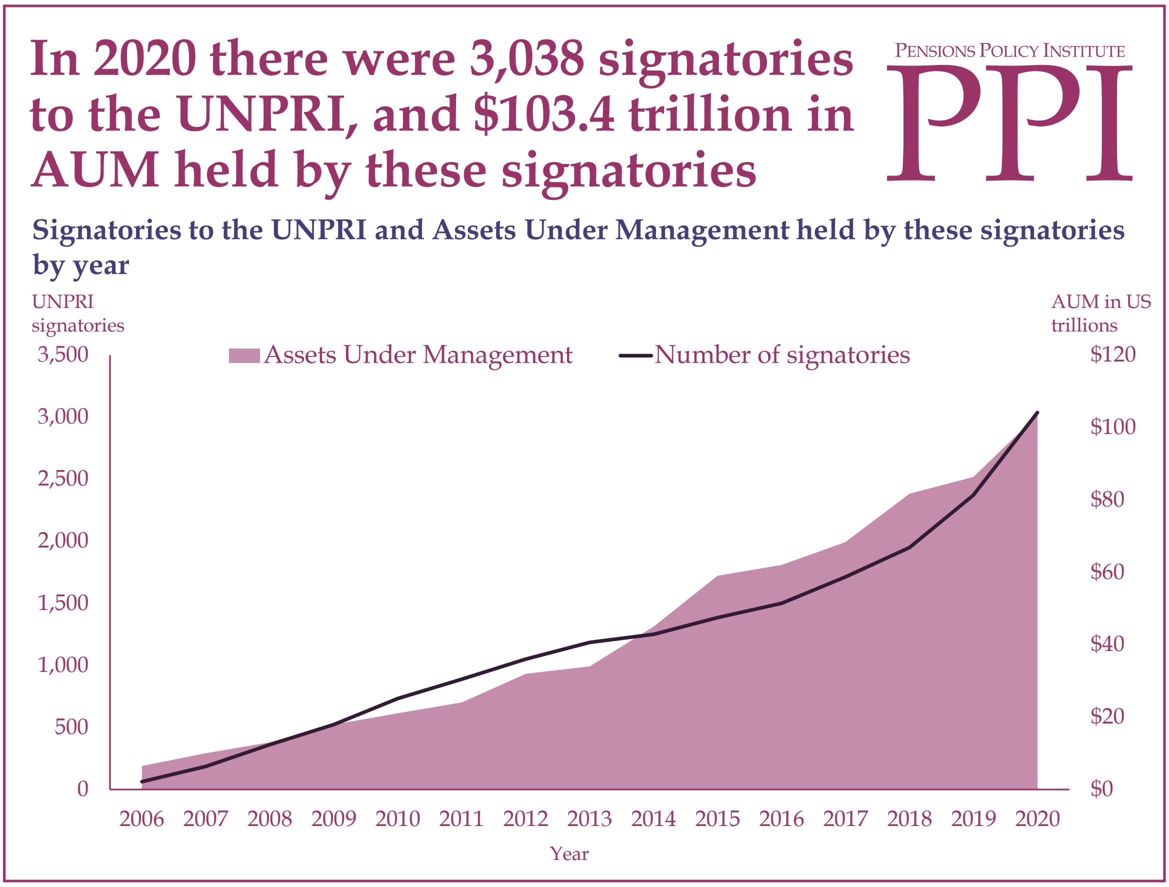
The global investment community is currently giving a great deal of attention to questions of sustainability, and in particular, to the role of Environmental, Social and Governance (ESG) considerations in the investment process. Examples of these considerations are climate change and environmental degradation ("E"), community relations and cybersecurity ("S"), executive remuneration and corporate transparency ("G") and a long and wide-ranging list of other topics.

The growth in interest in this area is being driven by increased recognition of the financial implications of these factors. Although they may have been given only passing attention by investors in the past, analysis of ESG considerations is today recognised as essential for gaining a true understanding of a business. In addition, there is increased pressure from consumers and regulators to consider the adverse impacts of business decisions, including financial ones, on the environment and communities. Pension schemes are required to disclose their policies on ESG, climate change, and stewardship activities.

As better data becomes available, and as reporting standards, analytical tools and other supporting infrastructure all advance, the integration of ESG considerations into investment processes has now become a mainstream approach. This is shown by the growth in the number of signatories to the UN Principles for Responsible Investment (UNPRI), and the associated Assets Under Management (Figure 3.4).

36 PPI Modelling

Figure 3.4[37]



While there is significant interest in several environmental and social considerations among UK investors, there is particular focus on climate change. The COP26 summit to be held in Glasgow later in 2021 is likely to drive continued UK regulatory activity in this area: a TCFD (Task Force on Climate-Related Financial Disclosures) Roadmap has already been published, setting out mandatory climate reporting requirements for pension schemes as well as for a wide range of other UK-regulated entities to apply from 2023. The requirements for pension schemes include scenario analysis of the resilience of the investment strategy to climate-related risks, and quarterly measurement of performance of the portfolio holdings in relation to targets relating to climate-related metrics.

UK investment practice is also shaped by the global context. The UNPRI are a key resource and influence on global approaches to ESG. And even though the UK has left the European Union, the EU's action plan for financing sustainable growth is likely to shape the global agenda in this area in the next few years.[38]

Although climate change is the single largest area of focus, ESG also touches a very long list of other topics. One consequence of the COVID-19 pandemic has been to emphasise the importance of global social conditions, and many investors believe that this will lead to an increased emphasis on the "S" element of ESG.[39]

ESG considerations vary between country and by type of factor

Meaningful pursuit of ESG objectives depends on suitable data being available. Data is needed both in order to integrate ESG considerations into investment decisions and in order to assess the impact of portfolio decisions on ESG factors. The availability of reliable data varies significantly between markets, and progress

37 www.unpri.org/pri/about-the-pri, PRI growth 2006-2020

38 www.unpri.org/sustainable-financial-system/explaining-the-eu-action-plan-for-financing-sustainable-growth/3000.article

39 Qualitative interviews

toward global reporting standards is important to address this gap. Several initiatives have been launched in recent years in response to demand for better corporate reporting of ESG-related data, and five of the leading organisations recently published a statement of intent to work together towards a comprehensive corporate reporting system.[40]

> *"For our business, dealing with the wide range of global regulations is a major challenge." - Alternative asset manager*

Even with the development of global reporting standards, it is likely that practices will continue to vary to some extent and that greater transparency will continue to be a challenge for investors in several markets. This is especially true in areas where cultural differences exist. While some ESG factors, such as climate change, are clearly global, many others, particularly social factors, are perceived differently across different cultures. Likewise, what is considered to be best practice with regard to corporate governance differs between markets. ESG differences can be particularly large between developed and emerging markets.

> *"The direction of travel for ESG has been west to east." - Asset manager*

ESG objectives are reflected not only in portfolio decisions, but also through engagement, i.e., interaction between investment managers and the investee companies. Engagement can be done through the exercise of voting rights, or through direct conversation with management. Because shareholder rights and practices vary between markets, ESG engagement can take different forms. As a general rule, domestic investors in any market may have an advantage over non-domestic investors in establishing common understanding and engaging effectively.

Schroder Investment Management provides an example of allowing for the effect of economic externalities in company analysis (Case Study 3).

Case Study 3[41]

The effect on society of the activities of corporations goes well beyond the financial. There are also environmental and social impacts – costs (or, sometimes benefits) that fall on others, referred to by economists as "externalities". ESG investors are interested in understanding these impacts, both because they are large and also because of the likelihood of social pressure and government intervention forcing companies to take responsibility for the costs their actions create.

Schroder Investment Management have analysed company data and academic studies in order to estimate the extent of these external costs. They found that the externalities generated by listed companies worldwide are equivalent to more than half of their profits, and that one third of companies would be loss-making if their negative social and environmental impacts were to be taken into account.

Because these costs are not spread evenly across different markets or different economic sectors, they may have significant implications for global investment decisions.

40 https://29kjwb3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/Statement-of-Intent-to-Work-Together-Towards-Comprehensive-Corporate-Reporting.pdf

41 www.schroders.com/en/sysglobalassets/digital/insights/2019/pdfs/sustainability/sustainex/sustainex-short.pdf

Universal ownership offers a different perspective

A notable recent ESG-related development among the very largest investors globally is the concept of universal ownership.[42] This universal owner perspective is built on a focus on the total investment portfolio, and the recognition that the single most important determinant of returns is global economic performance. This leads to an investment approach that aims to minimise externalities with negative spill over effects, like pollution, that are a by-product of some economic activities. From the universal owner perspective, these costs are not truly external, they are only being transferred to a different part of the portfolio.

The universal owner approach sees the asset owner's role not only as participating in global economic and market outcomes, but also as being able to influence them.

42. Quigley, E (2019)

Chapter Four: How might global investing develop, and impediments be overcome?

This chapter discusses how different challenges could affect future investment in global assets in light of expected changes within the pensions landscape, and how some challenges may be overcome.

The UK pensions landscape is currently going through several transitions. Changes in economic and labour market patterns have led to the closure of a significant proportion of Defined Benefit (DB) schemes in the private sector, while automatic enrolment has resulted in in the growth in the number of people saving into Defined Contribution (DC) schemes, the growth in asset value of DC schemes, and the emergence of master trusts as schemes that are likely to hold the majority of future DC savers.

These transitions, coupled with current investment trends, are likely to result in less overseas investment among closed private sector DB schemes, and more overseas investment by DC schemes.

As DC schemes grow, overseas investment is likely to become easier

UK DC schemes are growing in terms of membership, contribution levels, and funds under management. As schemes increase in size and value, they become more able to address the various challenges associated with overseas investment. In particular, challenges relating to matters of practical implementation and/or cost, can generally be more easily tackled when a scheme has grown sufficiently in size and value.

Challenges can roughly be broken up into three main areas, practical barriers, investment risk, and areas of uncertainty (Figure 4.1).

Figure 4.1

Challenges	Practical barriers	Investment risks	Areas of uncertainty
	• Investment costs • Lack of familiarity • Oversight and governance • Finding skilled investment managers • Legal restrictions	• Liquidity • Volatility • Currency risk • The expected benefits may not materialise	• Data issues • Political risk • Reputational risk • Shareholder rights may be weaker

Practical barriers:

Practical barriers may be related to cost, or to governance considerations:

- **Cost** - It is typically more expensive to invest outside the domestic market.
- **A lack of familiarity** - This is the first and most basic impediment encountered by an investor on moving outside the domestic market. It can encompass different legal structures; language barriers; authorisation and registration requirements, and so on.
- **Oversight and governance** - Greater complexity is involved in ensuring that the investment programme is run effectively.
- **Finding investment managers with the right skill set may be more difficult** - The more you diversify, the harder it can be to identify and access the best opportunities in every area of the portfolio.
- **Legal restrictions** - Even when the investor's home country does not restrict investment choice, there may be restrictions imposed by the country in which investment is being made. These restrictions might apply to foreign investors in general or to specific types of foreign investor only.

Investment risks:

Investment risk takes many forms, some of which are better understood than others:

- **Liquidity** - This varies greatly between different markets.
- **Volatility** - The benefit of diversification as a means of reducing volatility applies only at the aggregate portfolio level. Parts of the portfolio can be highly volatile when looked at on a standalone basis.
- **Currency risk** - Fluctuations in exchange rates magnify the volatility of overseas holdings.
- **The expected benefits may not materialise** - For example, even if emerging market economic growth is strong, that may not necessarily lead to stronger stock market performance. Similarly, diversification benefits are reduced during periods when all markets fall together, as can happen during global crises.

Areas of uncertainty

While the investment risks listed above can be – to some extent – anticipated and modelled, there are other types of risk (which we refer to as "uncertainty" here) which are less amenable to quantification:

- **Data issues** - Data may be sparse or unavailable. Accounting and reporting standards may be inconsistent.
- **Political event risk** - International investors can be vulnerable to political changes, which may adversely affect ownership rights and/or restrict their ability to move capital. In the event of debt default or restructure, foreign investors may be treated unfavourably.
- **Reputational risk** - Pension fund beneficiaries are an important stakeholder constituency, and may be uncomfortable if the investment programme is seen as supporting controversial activities such as human rights abuses, child labour, supply chain abuses and so on. Climate change has come to take on particular importance for many in recent years, making fossil fuel companies a sensitive area.
- **Shareholder protection** - Shareholder rights may be weaker, as may the alignment of management incentives with investor interests.

The preferred approach to overseas investment can change as scale increases

Over time, the main theoretical tenets for global investment have become well established and widely applied. This means that schemes looking to develop their global investing portfolio already have tried and tested methods and guides to follow. As a result, it is matters of practical implementation that often prove to be the key impediments to effective international investment.

Scale is a critical factor in determining what is feasible. As schemes grow in size, they are more able to afford to hire external asset managers and consultants to deliver a bespoke investment plan, and/or to bring investment teams in house to manage complex and shifting investment portfolios.

Familiarity and understanding are key factors for overcoming challenges, but increased resources can also result in a scheme's ability to bring in external or internal managers who have sufficient experience, and/or to provide in-house training.

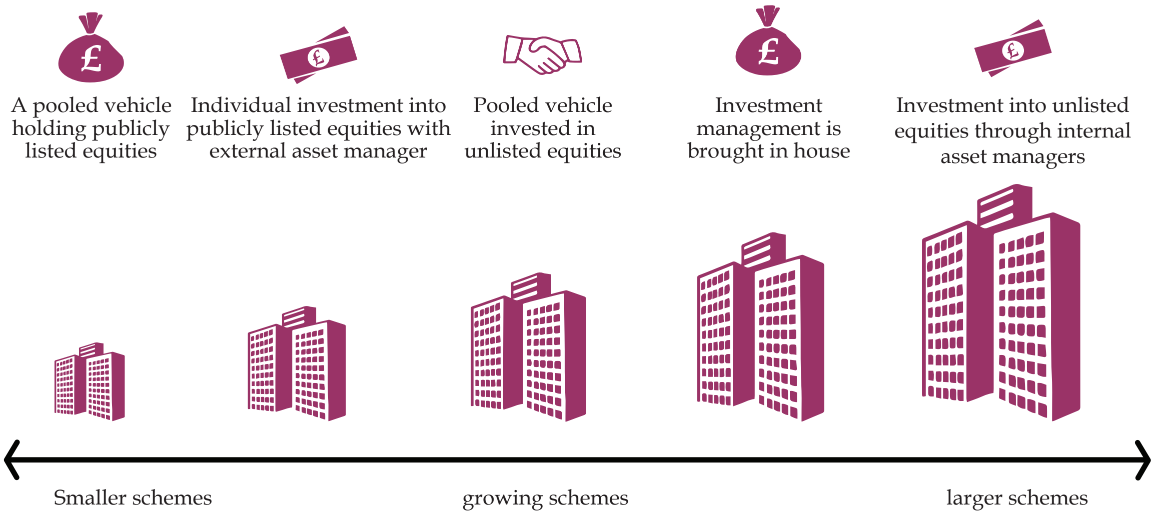
As pension schemes grow, there might be a natural progression through the following stages as the pool of available assets and familiarity with global investing grows, permitting effective oversight of more complex arrangements (Figure 4.2). An example, of how scale and opportunity may work together in relation to equities is set out below, though in practice a similar progression could apply to different asset types:

- **Smaller schemes:** investment into a pooled vehicle (an investment held jointly between several schemes) holding publicly listed equities
- **Growing scheme:** Individual (non-pooled) investment into publicly listed equities with external asset manager
- **Growing scheme:** Pooled vehicle invested in unlisted equities
- **Larger scheme:** Investment management is brought in house
- **Larger scheme:** Individual (non-pooled) investment into unlisted equities through internal asset managers

Figure 4.2

As schemes grow, the flexibility and practicality of potential global investment options increase

Examples of how global investment access options may open up to schemes as they grow in scale



In a step beyond those mentioned above, some very large pension schemes, such as Australian Super and the Canada Pension Plan, have opened up offices in other countries in order to better understand the investment options and facilitate investment in these countries.

"We see the in-house vs. external question as largely a cost issue, but note that it is enormously complex to set up a global asset management firm – it's not just a question of building an investment team. This is a highly regulated industry." - Industry association

As schemes grow, global investing across all asset types should become more accessible

The above example focusses on investment into equities - however, as schemes grow in size and capability, all global asset types are likely to become more accessible. For example, a smaller scheme may invest in a Real Estate Investment Trust (REIT) in order to gain exposure to the real estate market. REITs are listed companies that invest in properties, so investment in a REIT gives indirect, rather than direct, real estate exposure. This provides some of the potential return benefits without the property management responsibilities associated with direct investment. As pension schemes grow in size, they will have more opportunities to invest directly into property, both domestically and globally, allowing greater customisation and cost-effectiveness.

Scale, and the in-house or external expertise associated with it, means that investing in unlisted assets also becomes more feasible as the cost and due diligence these require are less of a barrier. In particular, a large proportion of global assets in both emerging and established markets, are unlisted equities, debt and credit instruments which can offer a high degree of diversification if spread across many countries and industries. Overseas investment into infrastructure potentially offers similar benefits, such as diversification and potentially higher returns, as schemes grow.

Timing considerations

Although this report has concentrated primarily on strategic policy, the success of any investment decision depends on timing. In particular, the benefits of a sound policy may be substantially reduced, or even negated, if the policy is implemented at the wrong time.

As of early 2021, investment markets worldwide have in general performed strongly for more than a decade, and valuations are high relative to historical averages. Further, interest rates are extremely low in many countries, even dropping below zero in some cases. Where market valuations are particularly high, the risk associated with timing is greater: market corrections cannot be anticipated with confidence, and the timing of any correction is especially difficult to forecast, but the potential for large market moves is greater in an environment of elevated valuations and negative interest rates.

No single measure captures the full story of market valuations, but a wide range of indicators are available that allow investors to build a view. Commonly-used indicators include:

- interest rates (e.g. the yield on U.S. Treasury bills or the ten-year U.S Treasury bond, on UK gilt-edged securities or German Government bunds);
- real interest rates (e.g. the yield on U.S. Treasury inflation protected securities);
- the corporate bond spread (e.g. the option-adjusted spread, or OAS);
- the ratio of stock prices to earnings or to asset value (e.g. a cyclically-adjusted price earnings ratio such as the Shiller PE ratio or a valuation-based ratio such as Tobin's Q).

One approach that can reduce the risk associated with timing is to implement strategic changes in stages, a technique known as dollar-cost averaging. By making several smaller moves spread over different dates, as opposed to a single large move, the investor reduces the potential downside risk.

Finding the right partners to work with is an important part of the global investing process

The quality of asset managers, consultants and other partnerships will affect outcomes for pension schemes. While small to medium-sized schemes are heavily reliant on the quality of their investment consultants and asset managers, larger schemes also often use external asset managers and other specialist providers - and will still be dependent on the quality of these asset management services, and the ability of these third parties to navigate external markets. Effective asset management requires both the ability to understand the investor's needs, and the requisite expertise in the non-domestic markets. From the UK point of view, the selection of firms with local presence in other countries is unusually wide as a result of UK's long history as a global financial centre. However, the breadth of available options will not necessarily be as wide in other markets and may limit access to appropriate asset managers.

"Some markets present operational, political or counterparty risks. The less operationally-efficient markets can be the ones with the greatest return opportunities. But working with the right partners is essential to manage these risks." - Asset manager

Choosing a reputable global custodian will help ensure the safety of global investments and effective operations

As with asset managers and consultants, the global custodian plays a significant role. The global custodian is generally a large bank which holds the titles of investments into assets across the world on behalf of the investor. Custodian accounts are considered to be less vulnerable to bankruptcy or error than individual brokerage firms and are specially designed for high value investments. Though many well-known banks act as global custodians, such as Bank of New York, State Street, JP Morgan, and Citigroup,[43] some investors may choose smaller, local custodians: in that case, due diligence review is required in order to ensure that they have the appropriate connections, infrastructure and expertise to deal with the investor's needs.

Improved governance is an area of continued focus

The ability of the investor to effectively oversee the programme is a key governance consideration. Effective governance includes clear definitions of responsibilities, with decisions being made at appropriate levels. In DC schemes, there is a dual governance challenge: i.e., responsibility for decisions lies both with individual plan participants and with the high-level boards who determine the structure within which participants act. This dual responsibility can lead to inferior decisions. In recent years there has been a change of focus among high-level boards away from attempting to educate participants in order to produce better decisions. Instead, boards put their main efforts into providing high-quality strategies designed to meet the needs of a wide range of participants, and into which these participants are placed unless they choose to opt out. These default strategies make use of expert committees, specialist staff and outsourcing to external specialists. This has allowed decision making to be timelier: boards establish policy guidelines and review outcomes.

Decision making within DB schemes previously lacked agility, as any changes to asset allocation strategies proposed by investment committees have traditionally needed to be run past investment consultants and trustee boards, which meet generally only a few times a year. Slower decision making can lead to pension schemes missing out on opportunities that require timely action. As within DC schemes, there has been significant focus on improving the quality and effectiveness of decision making in recent years. Successful development of a global investment programme requires a governance structure that draws on external and internal expertise and offers flexibility in decision making.

"The master trust model offers a more specialist/professional governance model, leading to less home country bias." - Asset manager

43 www.thebalance.com/how-does-global-custody-work-358169; www.institutionalinvestor.com/research/6565/The-World-s-Largest-Custodians

The evaluation of success should be based on appropriate (long-term) time horizons

A key element of the governance of an investment programme is the way in which success is assessed.

The high-level objective of the investment programme is, for a DB scheme, to generate the returns required in order to pay the benefits that have been promised, and, for a DC scheme, to generate the returns required in order to provide a competitive level of retirement income. Those objectives can only be assessed over very long time periods, however, and in practice the evaluation of success is generally based on a comparison of the returns achieved against market benchmarks.

For example, over a period, such as 2010-2019, during which investment markets in general performed strongly, good returns from the investment programme can be attributed more to the general market environment than to good decision-making on the part of the investment managers. Similarly, during a period such as 2008, when most asset values fell sharply, negative returns on the portfolio are not necessarily a sign of poor decision-making. For this reason, investment manager success is normally judged relative to a broad market benchmark. A global equity portfolio, for example, might be compared to the performance of the MSCI All Country World Index (ACWI) or the FTSE All-World Index.

It is important to distinguish the effectiveness of the strategic policy from the effectiveness of the implementation of that policy. The decision to invest in overseas assets, for example, is a strategic policy decision made by a governing board, and is based on a balance of risk, return and practical considerations. To the extent that the goal is the reduction of risk, rather than the enhancement of return, success should not be judged solely by the effect on returns. Indeed, it should be expected that there will be many time periods over which overseas markets will underperform the domestic market.

The majority of decisions made by investment staff and external managers are concerned with the implementation of the policy and are intended either (in the case of passive, or "tracker", management) to achieve the broad market return or (in the case of actively-managed portfolios) to exceed it. In this case, performance is commonly assessed based solely on returns relative to the relevant benchmark.

It is also important that an appropriate time horizon is used to assess success. If too short a time period is chosen, results can be more dependent on luck than skill, and it can encourage speculative activity to the detriment of long-term returns.[44] However, it is impractical to wait several years before beginning to assess results, as would in theory be necessary. External asset management mandates typically specify a rolling three-year time horizon for measuring performance. In assessing the performance of staff (for example, for remuneration purposes) investment firms frequently use a combination of periods: so performance might be judged based on an average of the one-, three- and five-year return achieved, for example.

Disruption from COVID-19 raises several questions for global investors

COVID-19 has disrupted every aspect of the global economy, including pension investment strategies. This has affected the landscape of international investment in several ways and may shape the approaches adopted in future.

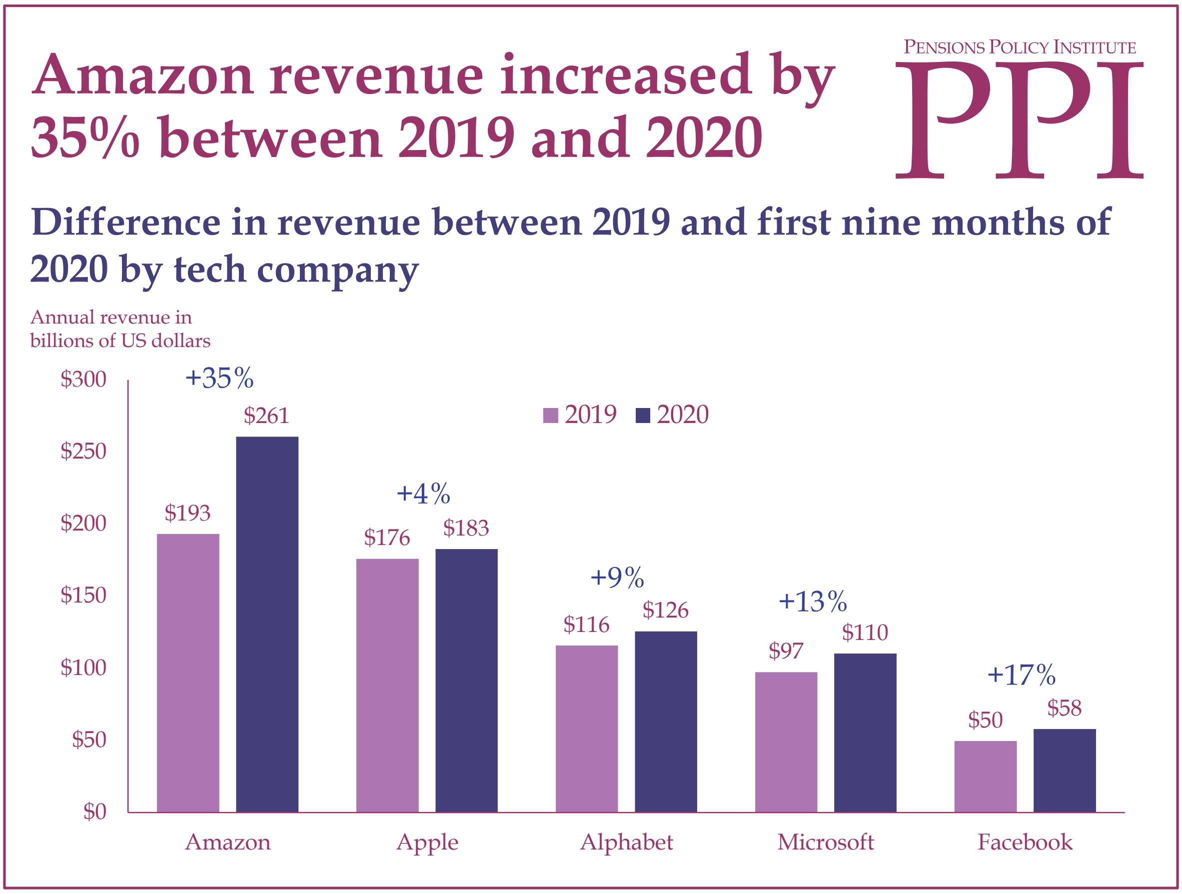
The most obvious impact in 2020 was an exceptionally high dispersion of returns between different types of asset, as COVID-19 proved helpful for some businesses and harmful for many others.[45] In particular, global equity market returns were driven by a small number of technology stocks (Figure 4.3).[46]

44 www.thinkingaheadinstitute.org/news/article/long-term-investment-premium-quantified/in which the premium for long-horizon investors is estimated as 0.5%-1.5% a year.

45 CTI (2020); www.msci.com/www/blog-posts/covid-19-and-real-estate-the/01940084943

46 Financial Times (2020) Robin Wigglesworth, May 1st, 2020 "*How Big Tech got even bigger in the Covid-19 era*"

Figure 4.3[47]



This magnified the variation between portfolio performance across different investment managers and different schemes, depending on whether they were overweight or underweight in these stocks relative to peers. Any bias away from (or towards) this narrow segment of the U.S. market had a disproportionate impact on 2020 returns.

This dispersion brings to the fore the importance of diversification and of currency hedging. Disruption and extreme return patterns also create the possibility of mispricing. The theory of efficient markets is based on the assimilation of all available information into market prices. But in periods of rapid change (i.e., when new information is emerging) and uncertainty (when information is difficult to interpret), significant deviation from efficient pricing is more likely. This creates opportunities as well as risk, highlighting the fragility of markets overall and the potential for a correction.

The uncertainty around market prospects has been magnified by variations in the impact of COVID-19, and in the political and economic responses of many countries. Differential responses mean that there may be greater variation in recovery and future development paths, reducing the homogenisation of global economies for the immediate future. Although global economies have become increasingly interdependent over time, COVID-19 may lead to a reconsideration of the extent to which complex global supply chains can be relied upon in a time of crisis, and hence to some retrenchment. Governments may seek greater self-reliance for more key functions, while corporations may seek to simplify supply chains.

"Memories are short – COVID-19 is a reminder that there are unknown unknowns." - Asset manager

47 www.statista.com/chart/21584/gafam-revenue-growth/

COVID-19 may result in increased variations in inter-country inflation

A specific concern identified by a number of the investors interviewed for this study is the possibility of inflationary pressure as a result of the stimulus measures that are being taken. This is an area where divergence may arise, since Governmental action has varied significantly between different countries.

COVID-19 will reinforce and accelerate several major market trends

COVID-19 is also expected to affect the development of markets through reinforcing and accelerating several major trends that were already under way. Examples of such trends include:

- disruption of the retail sector from the growth of online retailing,
- disruption of supply and demand in real estate markets as working practices evolve,
- increased demand for environmentally-friendly building practices.[48]

Further, as has been highlighted earlier, COVID-19 is expected to impact both the pace and the nature of the development of sustainable finance.

48 Mentioned by several interviewees

Glossary

Asset class	A group of investments with similar characteristics, properties and market behaviour, for example, equities, bonds, property, infrastructure.
Bonds	Bonds are lending contracts. Funds are lent to an organisation in return for a contract promising repayment of the capital plus interest at a certain time.
Currency risk	The risk of significant volatility in asset values arising from investing in assets denominated in a different currency from that of the investor.
Debt instruments	Investor lending to companies (also known as private debt) or syndicated loans (a pooled loan made to a company by several investors at the same time).
Equities	Investment into company shares. Equity shareholders are entitled to profits arising from company business, after all creditors have been paid what they are owed.
Fixed income	Investments which pay income as fixed interest payments until the maturity of the asset.
Forward currency contracts	A contract to enter into a foreign exchange transaction at a specified future date, at a pre-agreed exchange rate.
Gilts	Government bonds.
Global custodian	Generally a large bank which holds the titles of investments into assets across the world, for example, bonds, infrastructure etc., on behalf of the investor instead of allowing these to be held by a brokerage firm.
Hedging	A risk management strategy which aims to offset potential investment losses by investing in another asset which is likely to have negatively correlated returns and losses to the original asset.
Listed holdings	Assets listed on a public stock exchange.

Opportunity set	The individual assets and combinations of assets available to an investor at any given time.
Pooled investment vehicles	A fund which pools capital from many different investors to allow investment at a larger scale. Investors share risks and returns relative to the proportion of their investment.
Publicly listed	See “listed holdings”.
Strategic Asset Allocation	An investment strategy based on using certain types and proportions of assets in order to achieve an investment objective.
Unlisted holdings	Assets listed privately, generally only available through a third-party asset manager or direct negotiation with companies.

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