

Statistical bulletin

Funded occupational pension schemes in the UK: January to March 2022

The Financial Survey of Pension Schemes (FSPS) is a quarterly survey that gathers information about membership, income and expenditure, transactions, assets and liabilities of pension schemes. The information supplied forms part of the UK National Accounts and Balance of Payments, which are widely used within and outside of government.

Contact:
Harry Butterworth
financial.inquiries@ons.gov.uk
+44 20 7112 0116

Release date:
22 September 2022

Next release:
21 December 2022

Correction

22 June 2023 10:30

We have corrected a minor error in our dataset affecting overseas direct investments data.

In the previous version, estimates of overseas cash and cash equivalents only included overseas cash and deposits from Quarter 1 2020. We have corrected the error in our [latest dataset](#) to include total overseas cash and cash equivalents.

These data do not impact other estimates within the dataset.

Table of contents

1. [Main points](#)
2. [Summary of Quarter 1 \(Jan to Mar\) 2022 Financial Survey of Pension Schemes estimates](#)
3. [Gilts](#)
4. [Membership](#)
5. [Contributions and benefits](#)
6. [Assets](#)
7. [Funded occupational pension schemes data](#)
8. [Glossary](#)
9. [Measuring the data](#)
10. [Related links](#)
11. [Cite this statistical bulletin](#)

1 . Main points

- Private and public sector defined benefit and hybrid direct investment gilt holdings are published for the first time in this publication.
- Since March 2020, in private sector defined benefit and hybrid schemes, there has been a 32% decrease in conventional gilts with 25 years and over maturity, but a corresponding increase in index-linked gilts; these gilts are considered less risky for the investor as they are protected against inflation.
- Direct investment index-linked gilt holdings for defined benefit and hybrid UK funded occupational pension schemes stood at £385 billion as of 31 March 2022, representing 71% of all direct investment gilt holdings.
- Despite a record increase in active membership of 290,000, private sector defined contribution assets remained unchanged from 31 December 2021 to 31 March 2022.
- The value of equities and bond investments fell from 31 December 2021 to 31 March 2022, likely owing to the beginning of the conflict between Russia and Ukraine and increasing interest rates.

2 . Summary of Quarter 1 (Jan to Mar) 2022 Financial Survey of Pension Schemes estimates

Table 1 provides a summary of UK funded occupational pension schemes, split by scheme type for membership, benefits, contributions and the three main asset classes held: pooled investment vehicle (PIV) holdings, direct investments, and insurance policy assets. The table allows for comparison by presenting the first time period of published data from the Financial Survey of Pension Schemes (FSPS) Quarter 3 (July to Sept) 2019 along with the two most recent published time periods Quarter 4 (Oct to Dec) 2021 and Quarter 1 (Jan to Mar) 2022. For definitions of PIVs, direct investments and insurance policy assets please follow the link to the [full glossary of terms](#).

Table 2 illustrates overall assets, liabilities and derivatives of UK funded occupational pension schemes for the same time period as Table 1.

Table 1: Summary table by scheme type
UK, Quarter 3 (July to Sept) 2019 to Quarter 1 (Jan to Mar) 2022

	Units	Private sector DC			Private sector DBH			Public sector DBH		
		Q3 2019	Q4 2021	Q1 2022	Q3 2019	Q4 2021	Q1 2022	Q3 2019	Q4 2021	Q1 2022
Total membership	Million (number of people)	21.68	26.47	27.42	11.55	10.21	10.08	6.68	7.53	7.38
Total contributions	£ Million	5,362	6,002	6,685	7,088	6,432	8,067	2,653	3,204	4,052
Total benefits	£ Million	402	577	622	12,678	12,304	11,482	3,559	4,145	4,026
Total Pooled Investment Vehicles	£ Billion	134	212	212	743	744	796	224	312	293
Total Direct Investments	£ Billion	4	19	20	1,088	1,136	1,088	178	218	211
Total Insurance Policies	£ Billion	1	1	1	96	144	138	2	2	2

Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes

1. DBH equals defined benefit and hybrid, DC equals defined contribution.
2. For benefits and contributions, each time period relates to estimates over the quarter (for instance for Q3 2019 this is from July to September 2019).
3. For membership, pooled investment vehicles, direct investments and insurance policies, each time period relates to estimates as at the end of the period (for instance for Q3 2019 this is as at 30 September 2019).

Table 2: Assets and liabilities of UK pension schemes
UK, 30 Sept 2019 to 31 Mar 2022

	£ billion as at the end of		
	Q3 2019	Q4 2021	Q1 2022
Gross assets excluding derivatives	2,470	2,788	2,761
Gross liabilities other than pension liabilities, excluding derivatives	193	218	227
Derivatives contracts with a positive (asset) value	..	277	296
Derivatives contracts with a negative (liability) value	..	269	298
Net assets excluding derivatives or 'market value of pension funds'	2,275	2,570	2,534
Gross assets including derivatives contracts with a positive (asset) value	2,470	3,065	3,057

Source: Financial Survey of Pension Schemes (FSPS), Office for National Statistics (ONS)

Notes

1. “..” equals data not available.
2. Components may not equal totals.
3. Each time period relates to estimates as at the end of the period (for instance for Q3 2019, this is as at 30 September 2019).

3 . Gilts

Gilts account for a significant proportion of UK funded occupational pension schemes investments; as of 31 March 2022, 20% of assets excluding derivatives consisted of direct investment gilts. Conventional gilts are nominal bonds that have fixed coupon payments at the time of issue and pay at set time intervals. Figure 1 shows private sector defined benefit and hybrid (DBH) conventional gilts data collected from 31 March 2020. Conventional gilts only cover between 30% and 40% of total UK gilts as at 31 March 2022. Conventional gilts are broken down into four sections based on the length of the gilt's maturity, here represented by the four lines on the graph.

Private sector DBH conventional gilts with maturity of 25 years and over have decreased over the last eight quarters by 32%. This is in line with the patterns of de-risking that private sector schemes have been undertaking, where schemes may transfer long-term gilts to insurance companies via buy-ins and buy-outs. It links to an increase in index-linked gilts as discussed later.

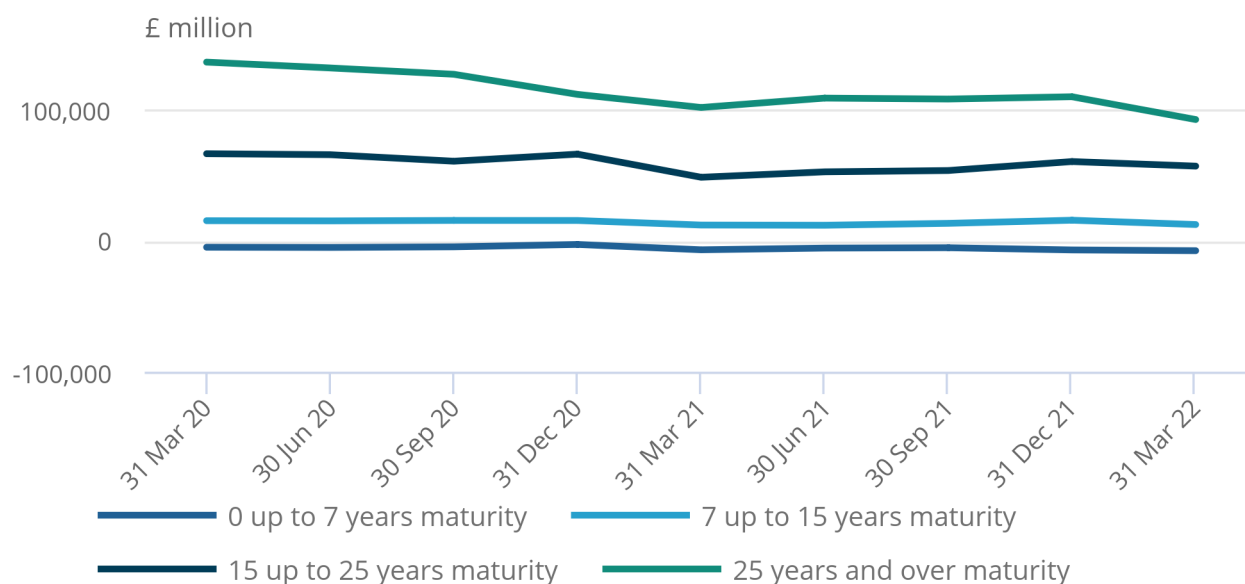
Looking at the shortest-term gilts (0 to 7 years maturity), these have remained relatively stable over the entire timeseries, but have a negative total owing to a combination of repurchase agreements and/or schemes short selling their bonds. Not every scheme has a negative value for these short-term gilts; the values shown in Figure 1 are net positions. Repurchase agreements are the main method for pension schemes to attain liquidity to make investment decisions and pay members without having to sell more illiquid assets.

Figure 1: Private sector defined benefit and hybrid conventional gilts by maturity

UK, 31 March 2020 to 31 March 2022

Figure 1: Private sector defined benefit and hybrid conventional gilts by maturity

UK, 31 March 2020 to 31 March 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. DBH equals defined benefit and hybrid.
2. Negative values are due to scheme short positions.

Figure 2 shows index-linked gilts, where the coupon payments are adjusted in line with the UK Retail Price Index (RPI). Private sector holdings have increased their proportion of these inflation-indexed bonds by 11%, which amounts to £47 billion, since 31 March 2020.

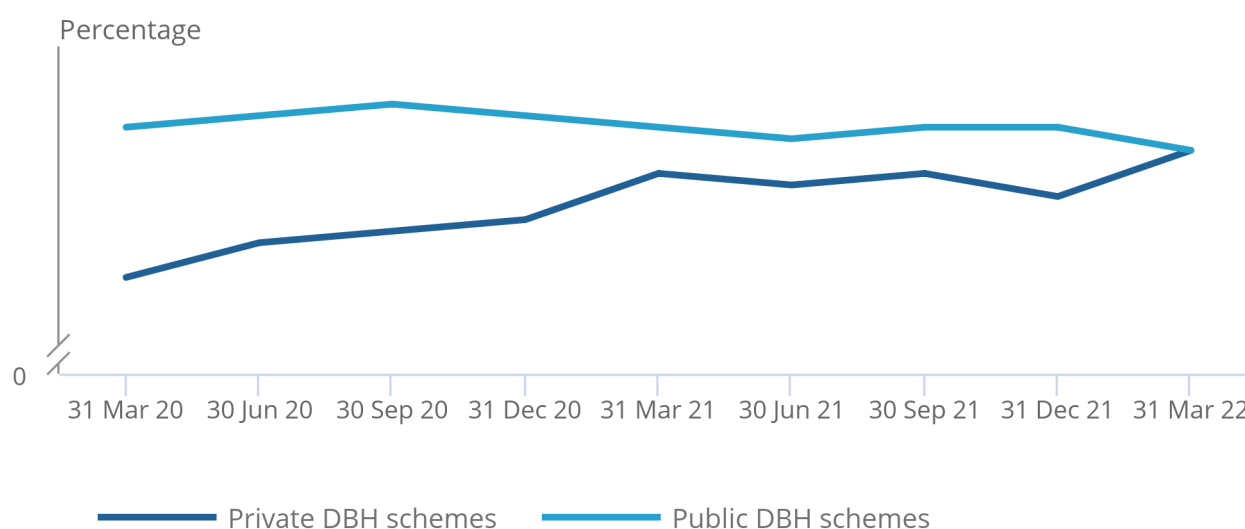
As shown in Figure 1, we have seen a decrease of over £43 billion in the longest-term conventional gilts since Quarter 1 (Jan to Mar) 2020. This correlates with the previously cited £47 billion uptake in index-linked gilts, which are seen as a lower risk to investors as the bond's coupons and final settlement amount retain their real (inflation-adjusted) value over time. This thereby protects their investment against the effects of inflation. In the public sector, much like with the conventional gilts, index-linked gilts have remained relatively stable, with between 72% and 75% of total gilts for public sector schemes.

Figure 2: Index-linked gilts as a percentage of total UK gilts

UK, 31 March 2020 to 31 March 2022

Figure 2: Index-linked gilts as a percentage of total UK gilts

UK, 31 March 2020 to 31 March 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. DBH equals defined benefit and hybrid.

Data show that as of 31 March 2022 private sector and public sector DBH schemes have 71% of their gilts in index-linked bonds. This is a total (across both sectors) of over £385 billion.

4 . Membership

Figure 3 presents the quarterly change in active membership for all scheme types from 31 December 2019 to 31 March 2022.

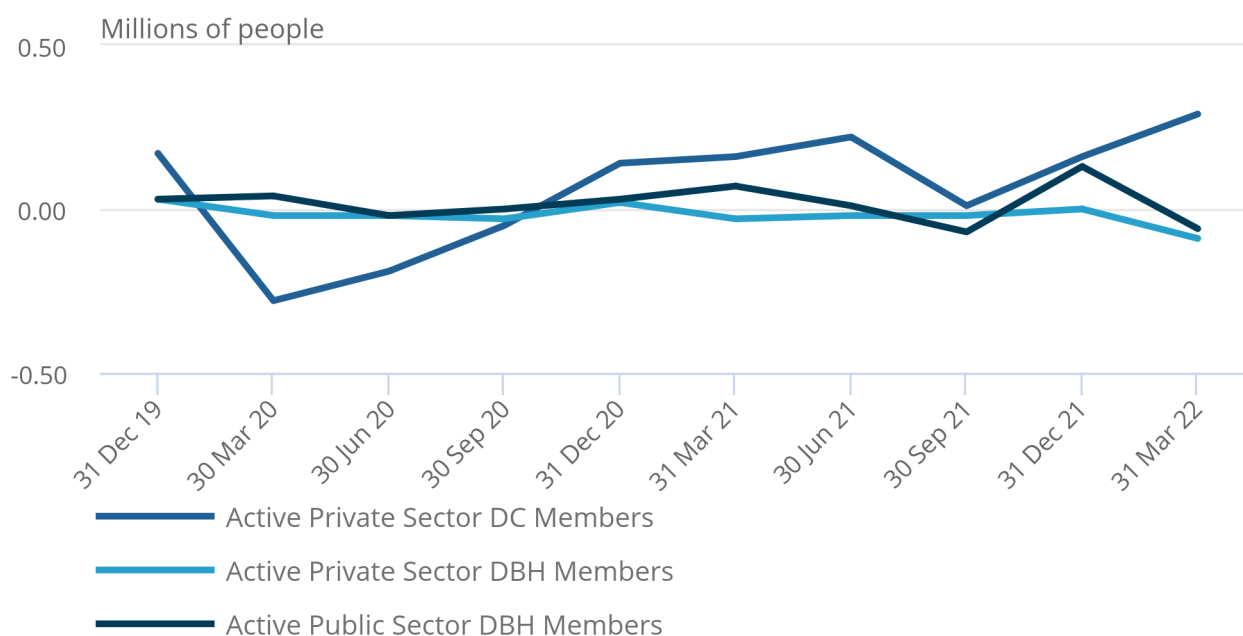
Private sector defined contribution (DC) active membership rose by 290,000 from 31 December 2021 to 31 March 2022, while private and public sector defined benefit and hybrid (DBH) active membership fell over the same period by 90,000 and 60,000, respectively.

Figure 3: Quarterly change in active membership by scheme type

UK, 30 September 2019 to 31 March 2022

Figure 3: Quarterly change in active membership by scheme type

UK, 30 September 2019 to 31 March 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. DC equals defined contribution.
2. DBH equals defined benefit and hybrid.

The change in private sector DC active membership this quarter represents the greatest increase in active members since the beginning of the survey. Private sector DC and public sector DBH active membership collectively increased by 200,000 from 31 December 2021 to 31 March 2022. This broadly reflects estimates from the wider labour market, where [payrolled employees increased by 228,000](#) from 31 December 2021 to 31 March 2022. Private sector DBH schemes are not included in the comparison with the increase in payrolled employees because a significant proportion of the decrease from last quarter came from scheme buy-outs and closure to accruals, which means that members would remain as payrolled employees.

5 . Contributions and benefits

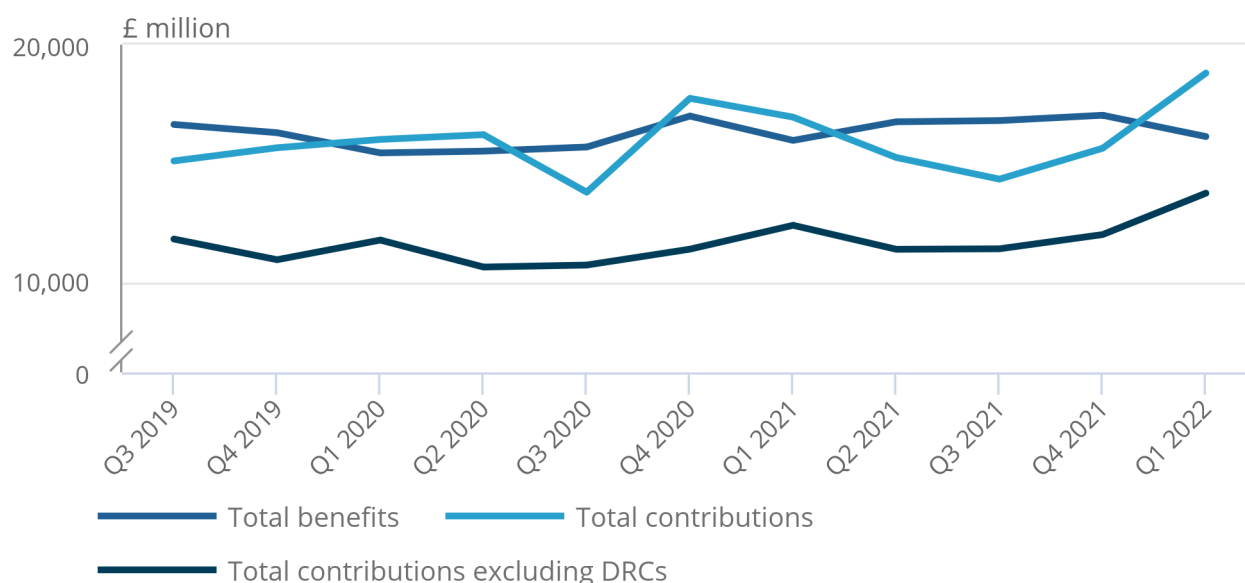
Figure 4 presents total benefits and contributions including and excluding deficit reduction contributions (DRCs) for all pension schemes from Quarter 3 (July to Sept) 2019 to Quarter 1 (Jan to Mar) 2022.

Figure 4: Total benefits and total contributions including and excluding deficit reduction contributions

UK, Quarter 3 (July to Sept) 2019 to Quarter 1 (Jan to Mar) 2022

Figure 4: Total benefits and total contributions including and excluding deficit reduction contributions

UK, Quarter 3 (July to Sept) 2019 to Quarter 1 (Jan to Mar) 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. DRC equals deficit reduction contributions.
2. Employee contributions to defined contribution DC schemes include tax relief at source, that is, amounts claimed by the scheme from HM Revenue and Customs in respect of tax relief on members' pension contributions.

Total contributions excluding DRCs increased by 15% from Quarter 4 (Oct to Dec) 2021 to Quarter 1 2022. Viewing the whole time series, there has been an increase in total contributions excluding DRCs from Quarter 4 to Quarter 1 in the past three years. The end of Quarter 1 equates to the end of a financial and tax year, where employees and employers may pay contributions for a full year. There is a larger quarterly increase in contributions in Quarter 1 2022 than Quarter 1 2021 or Quarter 1 2020, owing to a combination of a larger increase in active members in Quarter 1 2022 and lower DRCs in Quarter 4 2021.

Total contributions and total benefits are representative of the main inflow and outflow for pension schemes. Over Quarter 1 2022, contributions exceeded benefits by £2.7 billion. Larger contributions than benefits indicate net positive inflows to schemes in this period, increasing assets if all else is considered equal. However, contributions and benefits do not represent all pension scheme flows (for example, transfers).

6 . Assets

On 31 March 2022, all scheme types included in this bulletin had assets of between £2.5 trillion (market value of pension funds) and £3.1 trillion (gross assets including derivatives contracts with a positive asset value) – depending on the measure used. From 31 December 2021 to 31 March 2022, total gross assets excluding derivatives decreased by £27 billion (1%) (see Table 2).

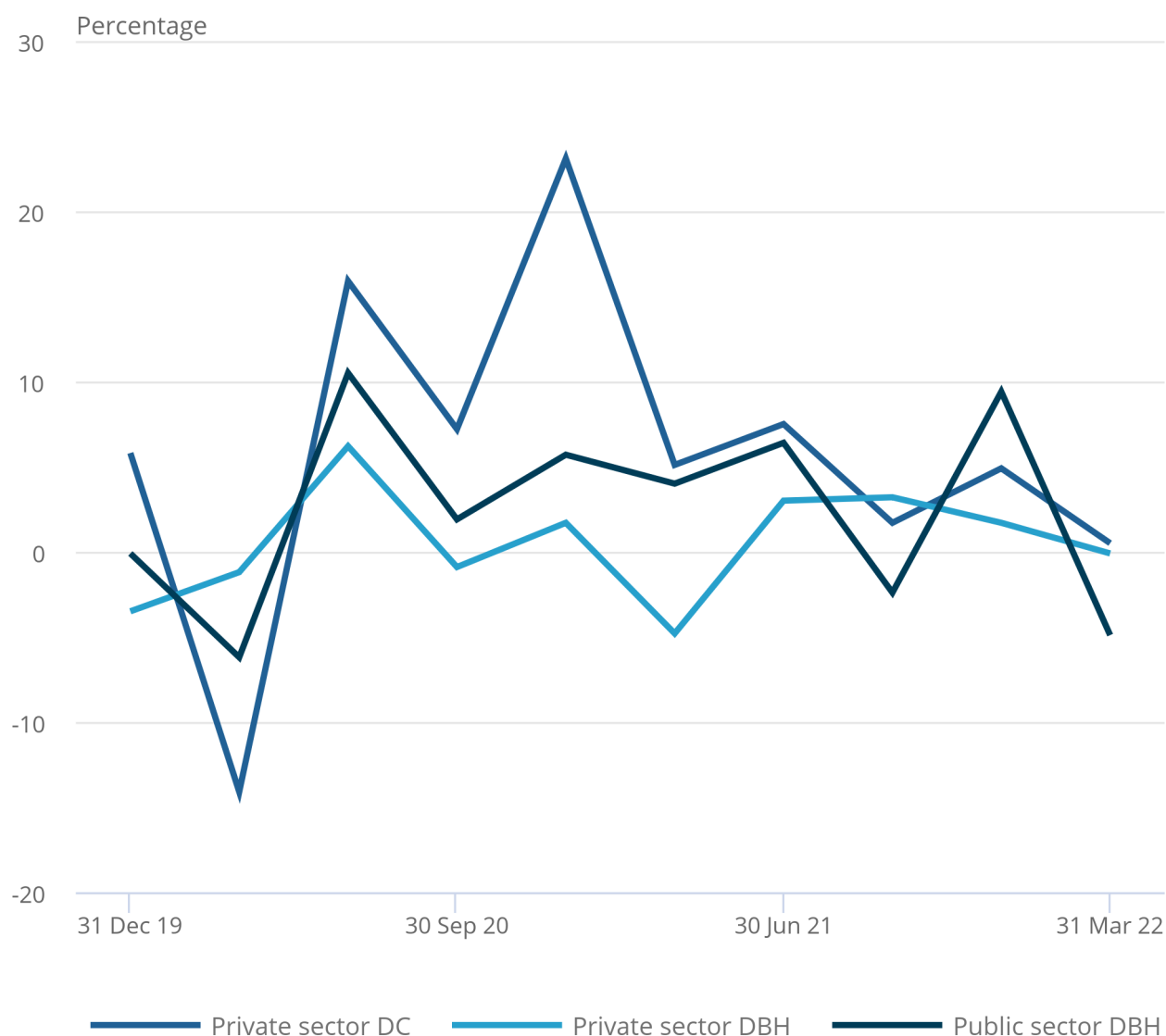
Figure 5 illustrates the quarterly percentage change in assets for all three scheme types. Public sector defined benefit and hybrid (DBH) schemes total assets fell by 5% from 31 December 2021 to 31 March 2022, while both private sector scheme types remained relatively unchanged.

Figure 5: Quarterly change in total assets excluding derivatives by scheme type

UK, 31 December 2019 to 31 March 2022

Figure 5: Quarterly change in total assets excluding derivatives by scheme type

UK, 31 December 2019 to 31 March 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. DC equals defined contribution.
2. DBH equals defined benefit and hybrid.

Given that the active membership of private sector defined contribution (DC) schemes experienced its largest increase this quarter (see Figure 3), investments for this scheme type performed relatively poorly, along with public sector DBH schemes. Equities are one of the main assets private sector DC and public sector DBH schemes hold. International equities markets were turbulent over Quarter 1 (Jan to Mar) 2022 in response to the beginning of the conflict between Russia and Ukraine. The [FTSE all-share index](#) had dropped by 8% by 7 March 2022, compared with 31 December 2021, while the [S&P Composite 1500](#) (an index of the market capitalisation for all sizes of public companies registered in the US) fell by 5% by 31 March 2022.

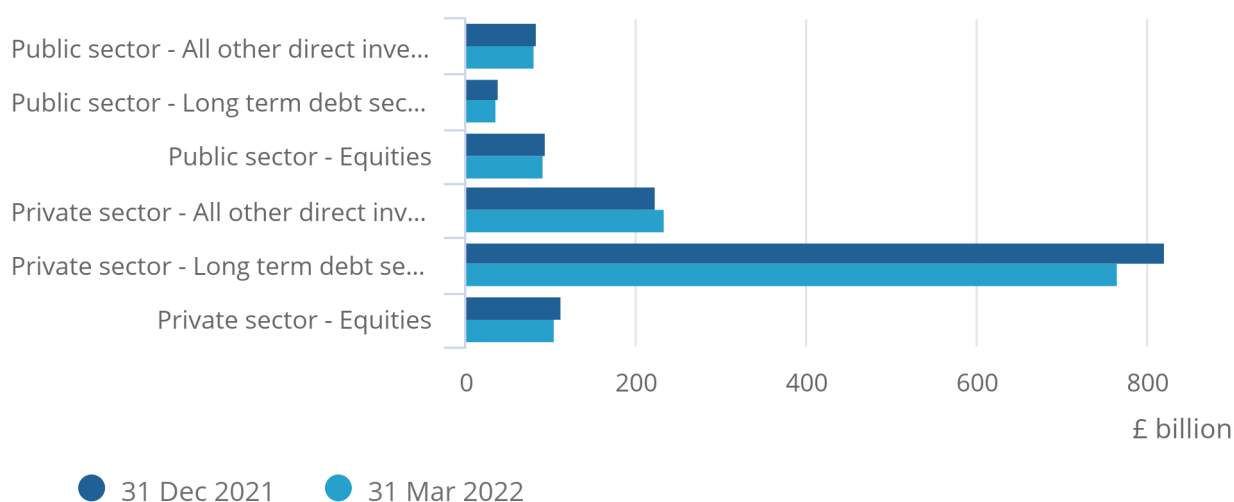
Schemes' investments predominantly come in two forms -- direct investments or pooled investment vehicles (PIVs). Figure 6 shows that direct investment assets in equities and long-term debt securities fell for both public and private sector schemes from 31 December 2021 to 31 March 2022. Equities and long-term debt securities fell by a similar percentage for private and public sector schemes (6% for private, 5% for public).

Figure 6: Private and public sector direct investments

UK, 31 December 2021 to 31 March 2022

Figure 6: Private and public sector direct investments

UK, 31 December 2021 to 31 March 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. Direct investments are defined in full glossary. Long-term debt securities include structured products.

In response to increasing inflation, over Quarter 1 (Jan to Mar) 2022, the UK interest rate was raised on two occasions by the Bank of England. Raising interest rates typically cause bonds (the main form of long-term debt security) to lose value. Most bonds pay a fixed interest rate, so investors will no longer prefer the lower fixed interest rate paid by bonds already issued, but rather new bonds issued in a higher interest rate environment.

Figure 7 shows the proportion of PIVs assets funds for equity, fixed interest and all other funds for 31 December 2021 and 31 March 2022.

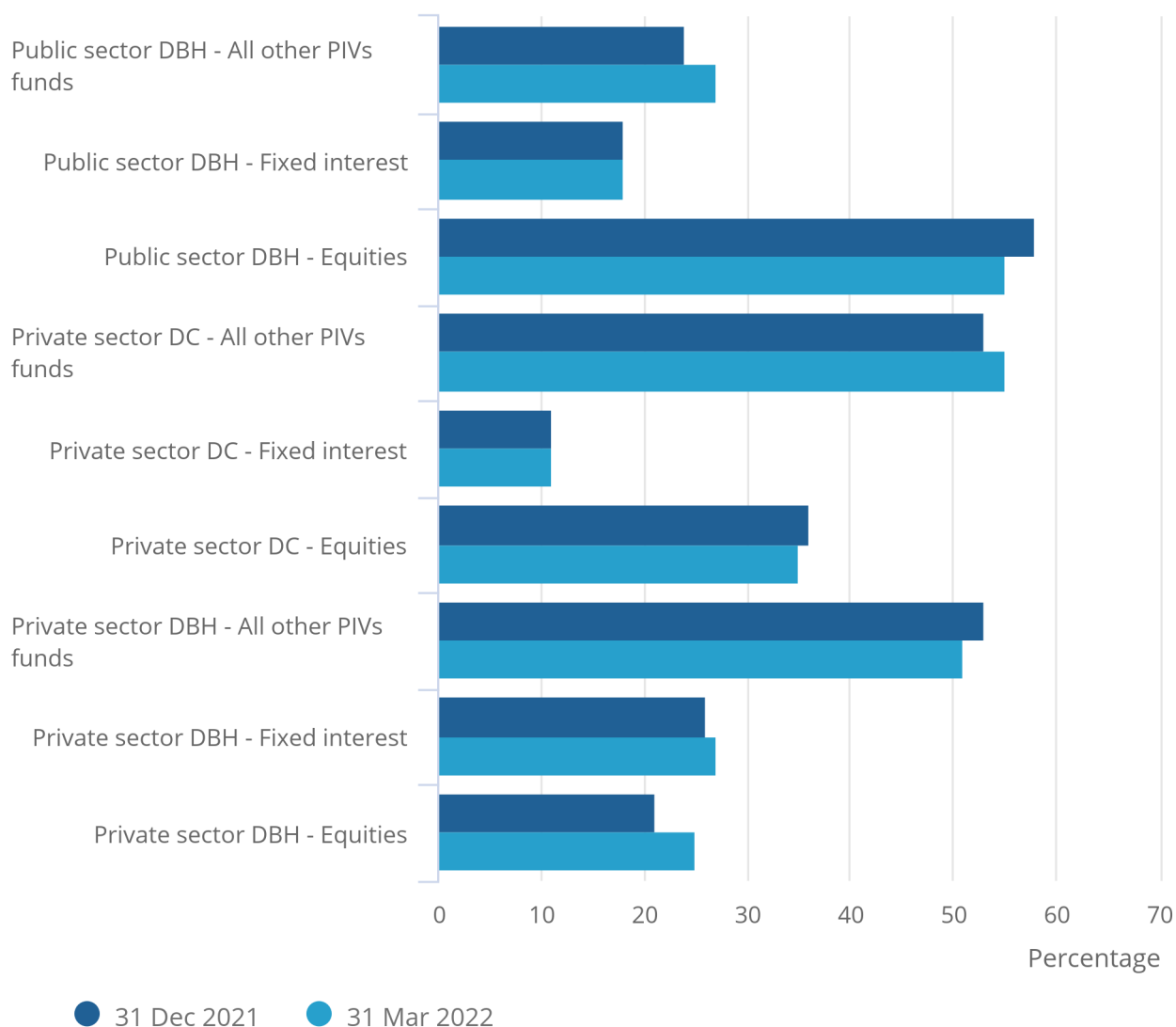
Here, the proportion of equities in pooled investment vehicles decreased for public sector defined benefit and hybrid schemes and private sector DC schemes but increased for private sector defined benefit and hybrid schemes from 31 December 2021 to 31 March 2022.

Figure 7: Proportion of pooled investment vehicle (PIV) asset types

UK, 31 December 2021 to 31 March 2022

Figure 7: Proportion of pooled investment vehicle (PIV) asset types

UK, 31 December 2021 to 31 March 2022



Source: Financial Survey of Pension Schemes (FSPS) – Office for National Statistics (ONS)

Notes:

1. DC equals defined contribution.
2. DBH equals defined benefit and hybrid.

Private sector DBH schemes PIV equities funds increased in proportion from 21% to 25% from 31 December 2021 to 31 March 2022. Given the poor performance of equities markets (see Figure 5) and that there has been an overall increase in PIVs assets (from £744 billion to £796 billion), the increase in private sector DBH schemes equities funds likely represent increased investment in this asset class by this scheme type, rather than gains in existing equities funds previously held.

7 . Funded occupational pension schemes data

[Funded occupational pension schemes in the UK](#)

Dataset | Released 22 September 2022

Provisional data on membership, contributions, benefits, and balances of funded occupational pension schemes in the UK: July 2019 to March 2022.

8 . Glossary

Active members

Members of pension schemes who are current employees and are either contributing to the scheme themselves, or having contributions made on their behalf (for instance by their employer).

Cash and cash equivalence

As per the guidance on the Financial Survey of Pension Schemes (FSPS) questionnaire, reporting within cash and cash equivalents includes the following categories: cash and deposits, reverse repurchase agreements, short-term loans, and long-term loans.

Deferred members

Members of pension schemes who have accrued rights to pensions that will come into payment in future but who are no longer actively contributing (or having contributions paid on their behalf) into the scheme. Also known as members with preserved pension entitlements.

Deficit Reduction Contributions (DRCs)

These are additional payments made by the sponsoring employer to reduce the shortfall of funding in a defined benefit and hybrid pension scheme. These payments to the pension scheme are in addition to regular ongoing funding contributions.

Defined benefit (DB)

Defined benefit (DB) pension schemes are ones in which the rules of the scheme specify the rate of benefits to be paid. A common DB scheme is a final salary scheme, in which the benefits are based on the number of years of pensionable service, the accrual rate and the final salary. An alternative DB arrangement is the Career Average Revalued Earnings (CARE) scheme.

Defined contribution (DC)

Defined contribution (DC) pension schemes are ones in which the benefits are determined by the contributions paid, the investment return on those contributions (less charges) and the type of annuity purchased upon retirement, if any. They are also known as a money purchase pension.

Government managed pension schemes

Schemes [classified](#) as having the "pension manager" in the Government sector (S.13) of the national accounts. In such cases, the Government sector (central and local government) is judged to be ultimately responsible for the schemes' pension obligations (the "pension manager") even if the Government sector is not responsible for scheme administration (the "pension administrator").

Pensioner members

Members of pension schemes who are receiving pensions or income withdrawals; sometimes known as beneficiaries.

A [full glossary](#) of terms is available.

9 . Measuring the data

Weighting and estimation

Information on the "Sampling" and "Weighting and estimation" methods for the Financial Survey of Pension Schemes can be found in Section 5 of our [UK pension surveys: redevelopment and 2019 results article](#).

Revisions

A [National Accounts Revisions Policy](#) is available to assist users with their understanding of the cycle and frequency of data revisions. You are strongly advised to read this policy before using these data for research or policy-related purposes. Please note that all estimates for 2019 and 2020 will now not be subject to revisions. Data has been revised, partly because of late survey returns, and partly because of disaggregate data revisions.

Survey coverage

The Office for National Statistics (ONS) replaced the MQ5 Pension Funds Survey (PFS) with the Financial Survey of Pension Schemes (FSPS) from Quarter 2 (Apr to June) 2019. The FSPS is a quarterly survey that collects data on the membership, income and expenditure, transactions, assets and liabilities of UK funded occupational pension schemes.

In practice, this means that all occupational schemes for private sector employees are in the survey, but the survey does not include all occupational schemes for public sector employees: funded schemes for public sector employees such as the Local Government Pension Scheme (LGPS) are included, but unfunded schemes such as those for civil servants, teachers and NHS staff are not.

Breakdowns

We present results for pension schemes for private sector employees (including those covered by the Pension Protection Fund) versus those for public sector employees; and by defined benefit including hybrid pensions versus defined contribution pensions. We use the term "schemes for public sector employees" throughout the bulletin but strictly speaking, these are government managed pension schemes ([see Glossary](#)).

There are no defined contribution occupational pension schemes for public sector employees, so there are three categories: public sector employee schemes, which are defined benefit and hybrid schemes, and private sector employee schemes, which may be further divided into defined benefit and hybrid and defined contribution schemes. See Glossary for the FSPS definitions of these categories.

Quarter 1 equals January to March; Quarter 2 equals April to June; Quarter 3 equals July to September; Quarter 4 equals October to December.

Response rates

The response rate for Quarter 1 (Jan to Mar) 2022 for the FSPS, at the period of closedown, was 78%. Please note that even though the response date has passed, it is possible that submissions for previous quarters are revised, and for late submissions to be provided. However, all estimates up to and including Quarter 4 2020 will not be subject to revisions.

10 . Related links

[Funded occupational pension schemes in the UK QMI \(Quality and Methodology Information\)](#)

QMI | Released 25 March 2022

Quality and Methodology Information for the funded occupational pension schemes in the UK using data from the Financial Survey of Pension Schemes (FSPS), detailing the strengths and limitations of the data, methods used, and data uses and users.

[UK pension surveys: redevelopment and 2019 results](#)

Article | Released 29 June 2020

Results from the new Financial Survey of Pension Schemes, which collects data from occupational pension schemes in the UK from April 2019. Results include employer and employee contributions, benefits, transfers, assets and liabilities.

[MQ5: Investment by insurance companies, pension funds and trusts: October to December 2018](#)

Bulletin | 21 March 2019

Investment choices of financial institutions based on financial transactions (investments and disinvestments), including balance sheet data for short-term assets and liabilities, and income and expenditure data.

[Financial Survey of Pension Schemes](#)

Survey | Updated 27 June 2022

A quarterly survey that gathers information about income and expenditure, transactions, assets and liabilities of UK-funded occupational pension schemes.

[Employee workplace pensions in the UK](#)

Bulletin | Annual Membership and contributions to workplace pension arrangements for UK employees by type, age, industry, public and private sector, occupation, and size of company. Compiled from the Annual Survey of Hours and Earnings.

11 . Cite this statistical bulletin

Office for National Statistics (ONS), released 22 September 2022, ONS website, statistical bulletin, [Funded Occupational Pension Schemes in the UK: January to March 2022](#).