

Compendium

Chapter 9: Pension scheme funding and investment, 2013 edition

This chapter is about how pension schemes ensure that they have the money to fulfil their obligations of paying out benefits to pensioners and their dependents. Specifically, the chapter is about 'funded' pension schemes, those in which benefits (the schemes' liabilities) are met from a fund built up in advance from contributions and returns on investment. It does not cover 'unfunded' (or pay-as-you-go) pension schemes – most public sector occupational pension schemes and the state pension system – where liabilities are not underpinned by a fund.



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Table of contents

1. [Summary](#)
2. [Pension schemes and pension funds](#)
3. [Pension scheme funding positions](#)
4. [Pension funds' income and expenditure](#)
5. [Fund income](#)
6. [Fund expenditure](#)
7. [Asset holdings](#)
8. [References](#)
9. [Background notes](#)

1 . Summary

Within the 'funded' pension scheme category, the chapter focuses mainly on **defined benefit** occupational schemes, because it is these schemes which have to pay out benefits based on a defined set of rules, even if the scheme is in deficit. As a result, the trustees of such schemes are tasked with ensuring that the schemes build up enough assets to cover their future liabilities. This is done by investing the contributions received from members and their employers via a pension fund (see **Pension schemes and pension funds**). Defined contribution occupational schemes also invest via pension funds, but the 'pot of money' that individuals have on retirement is determined simply by the contributions paid into the scheme and the return, after charges, from investing these contributions in pension funds; so it is not possible for such schemes to have a funding shortfall (deficit).

In 2011, the value of assets held in UK funded pensions was £2,040.7 billion (135% of GDP). These figures are not National Statistics. Figure 9.1 shows a breakdown of these assets by the four main types (see [Glossary](#)):

- self-administered pension funds;
- occupational pensions administered by insurance companies in the accumulation phase, excluding 'insurance-managed funds';
- personal (including group personal) pensions administered by insurance companies in the accumulation phase; and
- annuities and income drawdown administered by insurance companies in the decumulation phase.

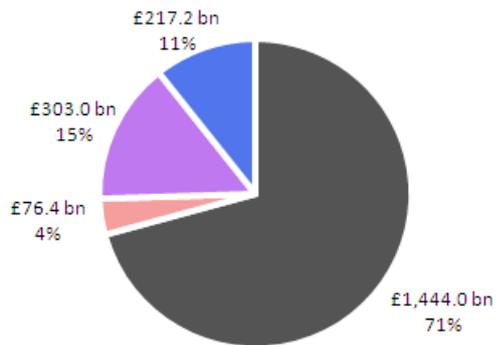
In the previous publication of this chapter, insurance-managed funds were included in occupational pensions administered by insurance companies, but are now included in self-administered pension funds.

There are no official statistics for the other category of pension assets, Self Invested Personal Pensions (SIPPs) but, according to a report by Mintel (see **References**), there were over £80 billion worth of assets under management in SIPPs in December 2010. It should be noted that this information is not a National Statistic.

In 2011, self-administered pension funds accounted for £1,444.0 billion, 71% of the total value of assets in pensions.

Figure 9.1: Assets held in funded pensions, 2011

United Kingdom



- Self-administered pension funds, accumulation and decumulation phase
- Occupational pensions administered by insurance companies, accumulation phase
- Personal pensions administered by insurance companies, accumulation phase
- Annuities and income drawdown administered by insurance companies, decumulation phase

Source: Office for National Statistics and Financial Services Authority

Notes:

1. Information on self-administered pension funds is from ONS's series: Investment by Insurance Companies, Pension Funds and Trusts. Information on insurance company assets held in pensions is from the Financial Services Authority (insurance companies' pension reserves, net)
2. Occupational pensions administered by insurance companies, accumulation phase: assets of insurance-managed funds have been subtracted from this category because they are shown as part of self-administered pension funds
3. Insurance company administered personal pensions comprise individual and group personal (including stakeholder) pensions. They exclude Self Invested Personal Pensions (SIPPs)
4. Figures may not sum to the total due to rounding

Self-administered pension funds' percentage of total assets held in pension funds was 55% in 2009 and 71% in 2011. Part of the increase is attributable to insurance-managed funds now being included in self-administered pension funds, rather than in occupational pensions administered by insurance companies. The download for Figure 9.1 shows the figures for 2011 and 2009, in both years excluding insurance-managed funds from self-administered pension funds and including them in occupational pensions administered by insurance companies. It shows self-administered pension funds holding 66% of assets held in pension funds in 2011, compared with 55% in 2009. It also indicates that assets held in occupational pensions administered by insurance companies fell by nearly 60% between 2009 and 2011. The results should be treated with caution due to a change in data sources between this and the previous publication.

The next section reviews pension schemes and pension funds, providing background information and definitions for both. The chapter then moves on to examine the funding positions of private sector defined benefit occupational pension schemes. The Pension Protection Fund (PPF) was set up under the Pensions Act 2004 to provide compensation to members of such pension schemes in cases when employers are declared insolvent and there are insufficient assets in the pension scheme to cover its liabilities¹. The analysis examines the funding positions of schemes which are eligible for PPF assistance.

The chapter then looks at the pension funds in which pension schemes' money is invested, in particular their income, expenditure and asset holdings. The analysis covers only self-administered pension funds, which are funds managed by scheme trustees or investment managers (including insurance-managed funds, where an insurance company acts as investment manager but does not have title to the assets). It includes funds of the Local Government Pension Scheme, which is a funded public sector defined benefit scheme with some 100 pension funds.

Most self-administered pension funds are associated with defined benefit occupational pension schemes. In some schemes, called non-contributory schemes, employees make no contributions, but in other schemes employees make contributions which are expressed as a proportion of salary (see Pension Trends [Chapter 8](#)). Employer contribution rates generally vary according to fund pressures. Members of defined benefit schemes build up entitlements over long periods and these are unaffected by changes in the value of the fund, except in the case where the scheme sponsor becomes insolvent and the fund is too small to meet the scheme liabilities. In defined benefit schemes, it is the employers who bear the full risk of market volatility.

Other self-administered funds are associated with defined contribution schemes, where each member's pension benefits, their pension pot, depends on the value and timing of the contributions made by themselves and their employer, and on how well the fund assets purchased by those contributions perform up to their retirement. Members do not build up entitlements to pension benefits. Instead, they gain access to their pension pot when they retire, which they normally use to purchase an insurance policy, known as an annuity, paying them a guaranteed income until death (see Pension Trends [Chapter 6](#)); or they draw an income from their fund, subject to certain scheme rules. Employees bear all the full risk of market volatility in defined contribution schemes, although they can defer the purchase of annuities² giving them some flexibility to counteract market uncertainty. They also bear all longevity risk in defined contribution schemes.

Notes for Summary

1. Further information is available at the [Pension Protection Fund](#) website
2. In the past, people could only defer securing an income, usually by the purchase of an annuity, until age 75. Under the [Finance \(No. 2\) Act 2010](#), the requirement to secure an income at age 75 was removed from 6 April 2011

2 . Pension schemes and pension funds

A pension **scheme** is an arrangement to provide benefits on retirement. An occupational scheme is organised by an employer, or on behalf of a group of employers, to provide benefits for one or more employees. In the private sector, such schemes have trustees and are governed by trust law. There are two¹ main types of occupational pension scheme:

- defined benefit schemes are those in which the rules specify the rate of benefits to be paid. The most common defined benefit scheme is a 'final salary' scheme, but 'career average' schemes (see Glossary) are increasingly important; and
- a defined contribution or 'money purchase' scheme is one in which the benefits are determined by the contributions paid in, the investment return on those contributions, and the type of annuity purchased on retirement.

Contributions made to the pension schemes are invested via a pension **fund** and the proceeds from that fund provide the benefits paid out on retirement. A pension fund can be thought of as the assets, the pot of money, associated with a pension scheme; it may not be a separate legal entity. The relationship between pension schemes and pension funds may be:

- one-to-one: a scheme's assets are invested in a single fund and the entire fund belongs to that scheme;
- many-to-one: a number of schemes' assets are invested into a single fund and proportions of the fund belong to each scheme. The schemes may be run by a single employer or a group of employers, with different rates of contributions and benefits for different groups of employees; and
- one-to-many: a scheme's assets are invested in a number of funds and each fund belongs to a separate group of members in the scheme. This arrangement is less common, but a key example is the local government scheme (the only major public sector scheme that is funded²). A single set of rules covers all local government employees, with each local authority or small group of authorities having its own fund.

An alternative to occupational pension schemes is the personal pension. This is an arrangement between an individual and a financial institution, although employers may facilitate and/or sponsor personal pensions. The individual's contribution, either separately or in a group personal pension, forms the basis of the pot of money which is available to convert into a pension on retirement. This chapter does not cover personal pensions, with the exception of Figure 9.1 and the accompanying analysis.

Notes for Pension schemes and pension funds

1. There are also hybrid schemes, which are workplace pensions that offer members either a choice, or mixture, of defined benefit and defined contribution rights at retirement (see Glossary)
2. Most other public sector schemes are run on an unfunded basis, meaning that there is no pot of money associated with the schemes. Instead, liabilities are met by employers as they fall due

3 . Pension scheme funding positions

Defined benefit pension schemes have to ensure that they have sufficient resources (assets) to meet their obligations (liabilities) when they fall due. When liabilities exceed assets, the pension scheme has a funding shortfall or deficit. In such cases, sponsoring employers usually increase contribution levels. If pension assets exceed liabilities, pension schemes are in surplus. When this occurs, the schemes sometimes offer breaks from contributing (known as contribution holidays). Whether a pension scheme is in deficit or in surplus will depend on the performance of its assets and the nature of its liabilities.

Pension scheme assets are normally valued on a market price basis, so they are easy to estimate. It is much harder to estimate pension scheme liabilities. A number of factors must be considered, including the length of time that pensions will need to be paid to each member – which depends on members' life expectancies – and the amount by which pensions will need to increase each year. The future stream of payments must then be valued in 'present value' terms using a technique known as discounting, which converts the value of future payments which will be made over a number of years into present-day equivalent value. For the purpose of setting contributions, the UK's scheme-specific funding regime requires the scheme's trustees and sponsoring employer to agree an appropriate discount rate (based on actuarial advice) with The Pensions Regulator. This measure of liabilities is known as [Technical Provisions](#), and varies across schemes.

In the UK, the most comprehensive dataset for estimating liabilities of defined benefit occupational pension schemes is that which is used to compile the Purple Book published by the Pension Protection Fund (PPF) and The Pensions Regulator (TPR). The [Purple Book \(2012\)](#) estimates these liabilities for schemes in the 'PPF universe' (mainly private sector schemes)¹ using two methods: the full buy-out approach and the section 179 (s179) method. The full buy-out approach estimates the cost of fully insuring the scheme, while the s179 method estimates the cost of buying out PPF levels of compensation with an insurer². The Technical Provisions measure is between these two measures of liabilities. The results are shown in Table 9.2.

Table 9.2: Total liabilities of PPF-eligible defined benefit occupational pension schemes, 2006 to 2012

United Kingdom

	£ billion						
	2006	2007	2008	2009	2010	2011	2012
Full buy-out	1,273.5	1,289.3	1,356.0	1,351.6	1,359.2	1,435.5	1,702.6
s179	792.2	769.9	842.3	981.0	887.9	969.7	1,231.0

Source: Purple Book 2012, Pension Protection Fund and The Pensions Regulator

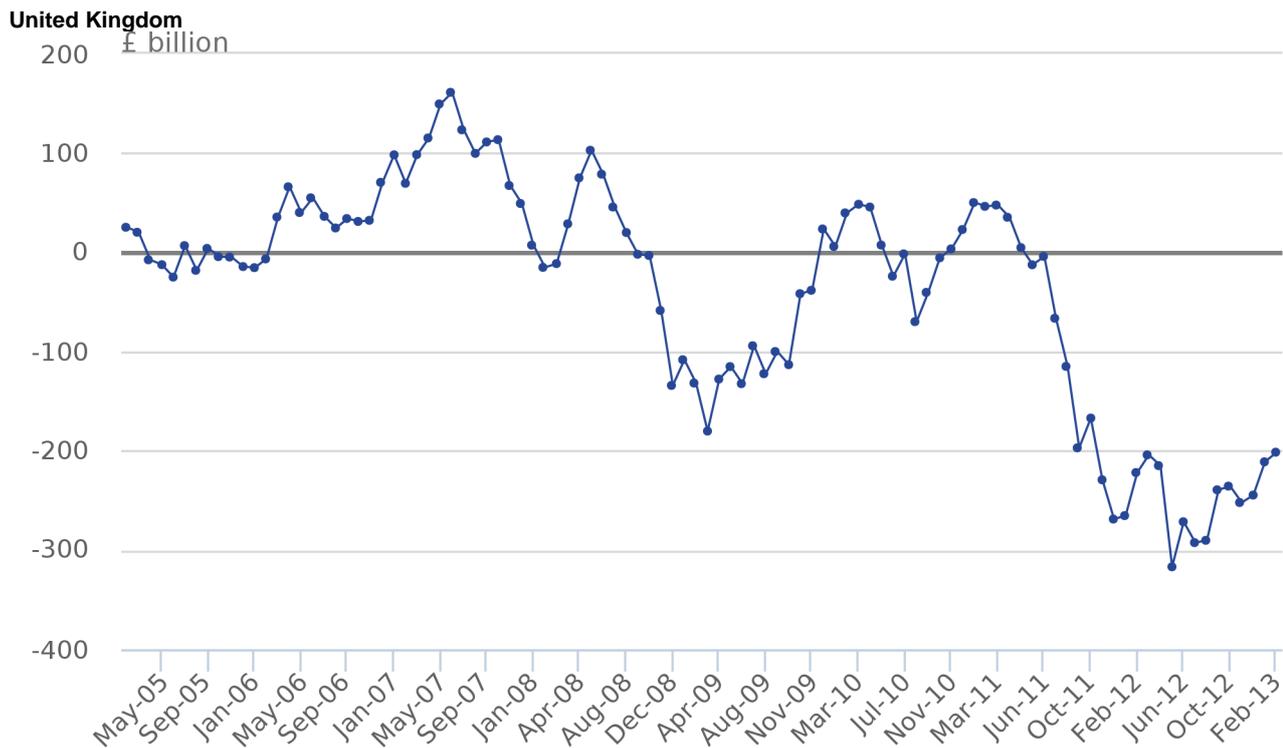
Notes:

1. The information in this table is not a National Statistic
2. Headline funding figures as presented in Purple Books 2008 to 2013. For 2006 and 2007, the figures are based on the extended Purple datasets published in the Annexes to Purple 2007 and 2008. The liabilities are those at 31 March for each year
3. Figures before 2010 include schemes in assessment. These are schemes that enter an assessment period to determine their ability to pay PPF levels of compensation, before being transferred into the PPF

Both s179 and full buy-out estimates of total liabilities show an increase over the time period, especially between 2011 and 2012. However, some caution is required for the interpretation of movements in aggregate liabilities of defined benefit schemes. This is because they are sensitive to changes in accounting assumptions, particularly in relation to the discount rate. The discount rate used for the s179 and full buy-out method is based on gilt yields. Gilt yields fell during the 2008–09 recession and, since the spring of 2011, have decreased again to a greater extent, pushing up these measures of liabilities.

Figure 9.3 shows the monthly aggregate funding position (assets minus liabilities) for all PPF-eligible schemes using the s179 method. There has been considerable volatility over the past eight years. Starting from a surplus of £25.2 billion in February 2005, the overall funding position was slightly negative until early 2006, mainly because of poor returns from equities. The improvement in the stock market and rising bond yields in 2006 and 2007 saw the aggregate funding position moving into surplus, peaking at £161.2 billion in June 2007. In 2008, falling equity markets and bond yields led to a worsening of the funding position. There appeared to be some recovery in spring 2008, but this was largely due to a change in actuarial assumptions at the end of March, which produced a one-off decrease in liabilities of £40.1 billion. The funding deficit increased during the rest of 2008 and early 2009, peaking at £180.2 billion in March 2009. The funding position moved back to surplus in December 2009 (£23.5 billion) in part due to new actuarial assumptions introduced in October 2009 which led to a one-off reduction in liabilities of £71.6 billion. Between June and October 2010 a deficit was registered once more as bond yields fell, but in November 2010 the funding position returned to surplus until May 2011.

Figure 9.3: Aggregate funding position of defined benefit occupational pension schemes in the PPF 7800 index, February 2005 to February 2013



Source: Pension Protection Fund 7800 Index, end-February 2013

Notes:

1. The information in this chart is not a National Statistic
2. Aggregate funding position equals total assets minus total liabilities, on an s179 basis
3. The '7800 index' covers the 6,316 defined benefit occupational pension schemes potentially eligible for entry to the PPF (at February 2013). The number of schemes in the index has declined over time
4. Changes made to actuarial assumptions from 31 March 2008 produced a one-off decrease in liabilities of £40.1 billion
5. Changes made to actuarial assumptions from 31 October 2009 produced a one-off decrease in liabilities of £71.6 billion
6. Changes made to actuarial assumptions from 1 April 2011 produced a one-off decrease in liabilities of £30.6 billion

In April 2011, further changes to actuarial assumptions brought about a one-off increase in liabilities of £30.6 billion, reducing the surplus in that month. From May 2011, increasing deficits were registered, reaching a peak of £317.0 billion in May 2012. The lowest funding ratio in May 2012 mainly reflected low levels for 15-year gilt yields (see [Purple Book \(2012\)](#)). Since then, the deficit has decreased to £201.5 billion in February 2013.

Notes for Pension scheme funding positions

1. The [Purple Book \(2012\)](#), Chapter 4 (see **References**). The PPF universe covers private sector defined benefit schemes (with some exceptions); it does not include the Local Government Pension Scheme (a public sector defined benefit scheme). The sample of 6,316 schemes covers 98% of the total number of PPF-eligible defined benefit schemes, and over 99% of their liabilities.
2. For pension scheme members who are below their scheme's normal pension age, PPF compensation may be below full benefit levels, outlined in [What is the Pension Protection Fund and What Do We Do?](#) This is why the estimates of aggregate liabilities based on s179 (the cost of buying out PPF levels of compensation with an insurer) are well below the estimates based on the full buy-out method.

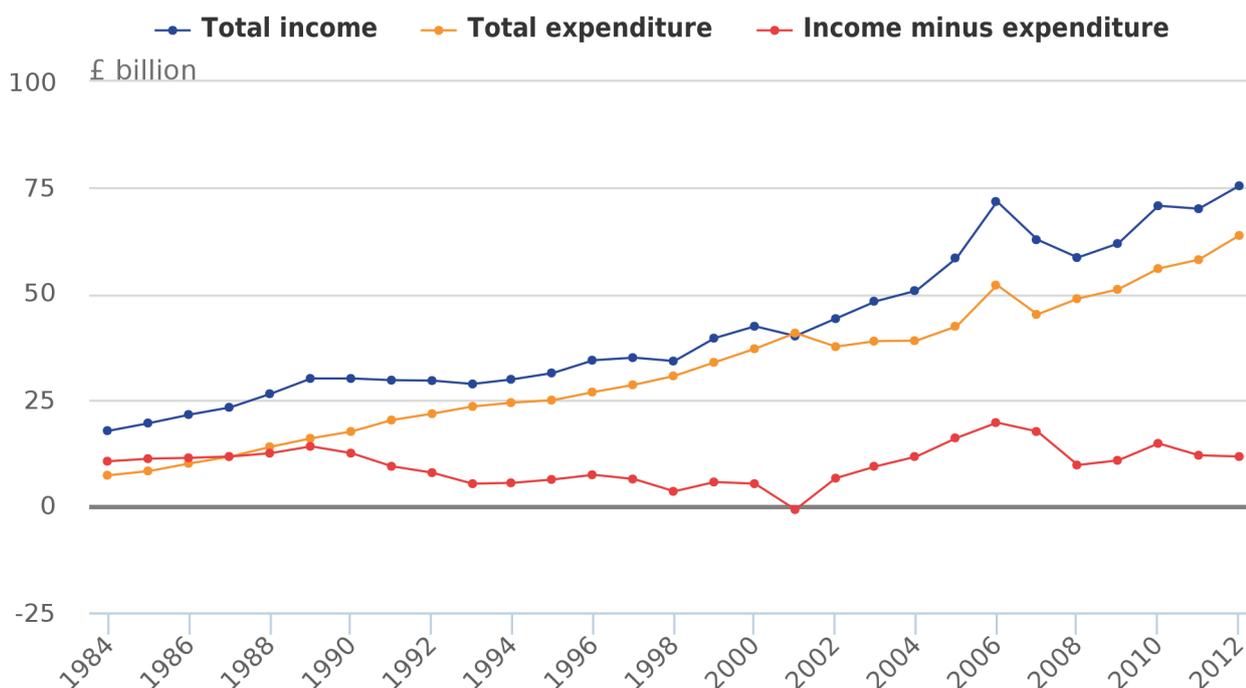
4 . Pension funds' income and expenditure

To ensure that they build up enough assets to cover their future liabilities, occupational pension schemes invest the contributions received from members and their employers via a pension fund. In the remainder of this chapter we look at these pension funds, using data from the Office for National Statistics (ONS) series Investment by Insurance Companies, Pension Funds and Trusts (sometimes referred to as 'MQ5' ¹). The presented analysis covers only self-administered pension funds, which are funds managed by scheme trustees or investment managers (including insurance-managed funds, where an insurance company acts as investment manager). Self-administered pension funds include funds associated with the Local Government Pension Scheme.

Figure 9.4 shows the growth in total income and expenditure of self-administered pension funds between 1984 and 2012. Total income for self-administered pension funds consists of employers' and employees' contributions, income from rents, interest and dividends, and inward transfer payments. Total income rose from £17.8 billion in 1984 to £71.8 billion in 2006. From 1984 to 2006, annual income growth averaged 7%, although there were some periods of stagnation, particularly during the economic downturn of the early 1990s. Total income fell to £62.8 billion in 2007 and £58.6 billion in 2008 - the biggest falls since the start of the series. In 2009 it recovered somewhat and in 2012 it reached £75.5 billion, surpassing the previous peak in 2006. The reasons for these movements are explored in the next section.

Figure 9.4: Self-administered pension funds' total income and expenditure, 1984 to 2012

United Kingdom



Source: Office for National Statistics

Total expenditure for self-administered pension funds consists of pensions and other payments to members and their dependants, outward transfers and other expenditure, mainly administration costs. Expenditure rose steadily from £7.3 billion in 1984 to £40.8 billion in 2001, with an average annual growth rate of 11%. After falling by 8% in 2002, expenditure increased from 2003 to 2006, peaking at £52.1 billion. In 2007, expenditure by self-administered pension funds fell by 13% to £45.2 billion. Most of the fall came from a decrease in pension payments and transfers to other pension schemes. Total expenditure by self-administered pension funds increased in the following three years, to a new peak of £63.8 billion in 2012, as a result of increases in payments of pensions and transfers to other pension schemes. The components of expenditure are discussed in detail below.

Net income – total income minus expenditure – fell from £14.1 billion in 1989 to minus £0.8 billion in 2001, before rising to reach a peak of £19.7 billion in 2006. In 2012, net income was £11.7 billion.

Notes for Pension funds’ income and expenditure

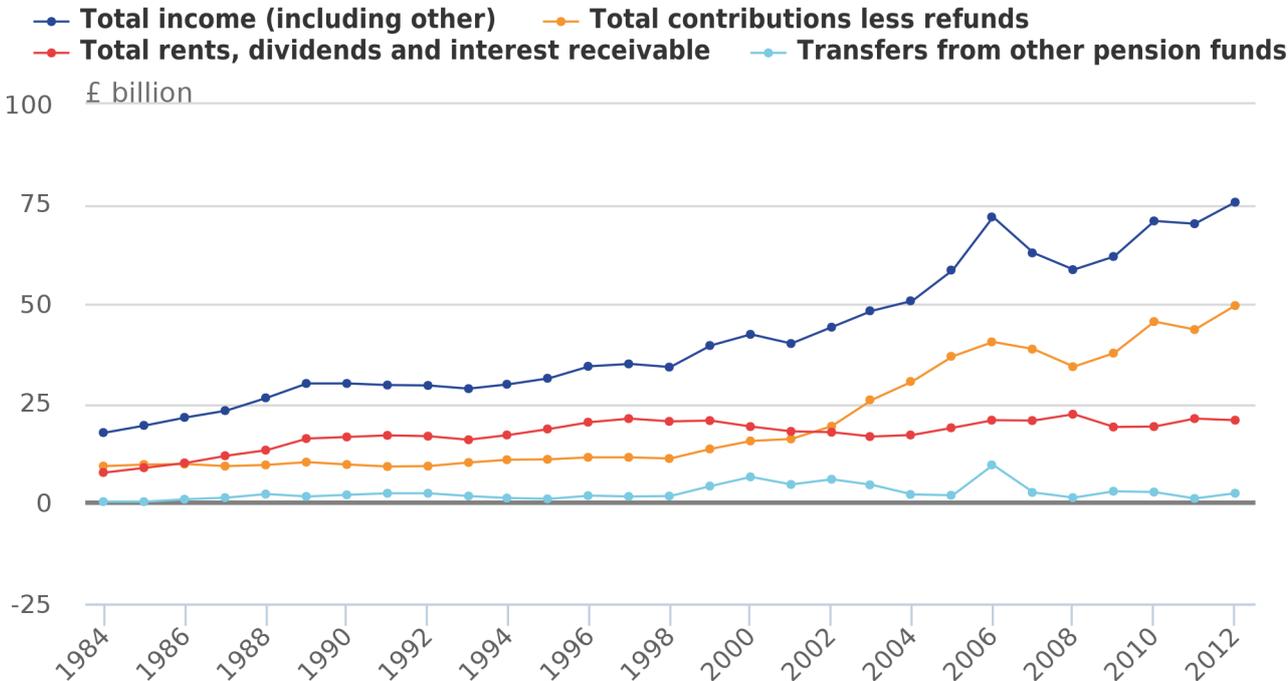
- 1. MQ5 data are based on a sample of insurance companies, pension funds, investment trusts, unit trusts and property unit trusts (see [MQ5 Quality and Methodology Information](#) for details).

5 . Fund income

In 2012, most of the income of self-administered pension funds came from contributions (less refunds) and from investment income (income from rents, dividends and interest receivable), as shown in Figure 9.5. Total contributions were more or less flat from 1984 to 1998, as pension schemes acted to reduce surpluses by lowering contribution rates and granting contribution holidays.

Figure 9.5: Self-administered pension fund income, 1984 to 2012

United Kingdom



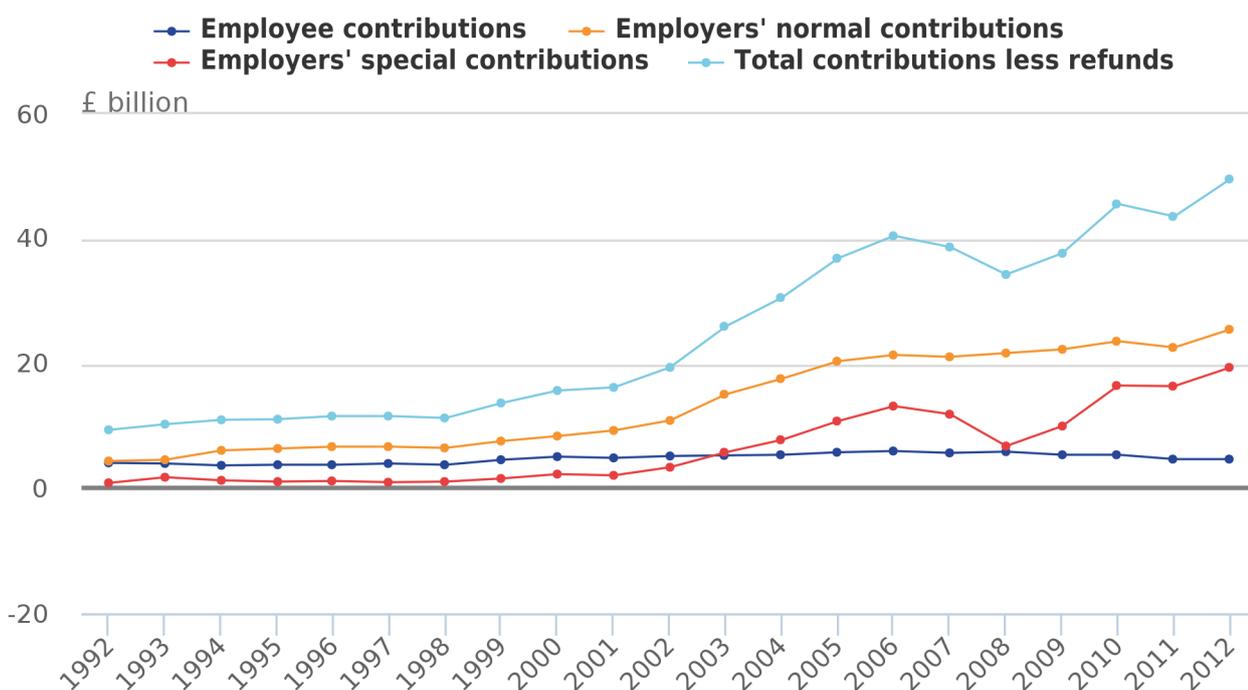
Source: Office for National Statistics

Total contributions to self-administered pension funds rose between 1999 and 2006 as pension schemes attempted to rebuild their finances in light of disappointing investment returns and the increasing longevity of retirees (see Pension Trends [Chapter 2](#) and [Chapter 3](#)). The fall in total contributions in 2007 (to £38.7 billion) may partly reflect the relatively strong funding position of defined benefit pension schemes that year (Figure 9.3). The number of schemes in the PPF 7800 index that were estimated to be in surplus reached 4,810 (76% of the total) at end-June 2007¹. Financial pressures at the onset of the 2008–09 recession, when the funding position of defined benefit pension schemes deteriorated, may help to explain the further fall in total contributions to £34.3 billion in 2008. The number of schemes in the PPF 7800 index that were estimated to be in deficit reached 4,938 (78% of schemes) at end-December 2008. However, in 2009 total contributions rose to £37.7 billion and in 2012 they were £49.6 billion. This suggests that defined benefit schemes may have been trying to repair their funding position as a result of recent recessions.

Figure 9.6 looks at contributions in more detail for the period since 1992, when breakdowns first became available. Total contributions are made up of employee contributions (regular and Additional Voluntary Contributions) and employer contributions (normal and special). Special contributions are payments made by employers, over and above normal payments, to reduce funding deficits or to meet additional costs as required by the scheme rules. The distinction between normal and special contributions may be blurred in some cases, if the employer makes up the balance between employee contributions and the amount required to maintain a healthy scheme funding position. Nevertheless, the trend in employers' special contributions since 2006 suggests that this is the part of total contributions that responds most to changes in the funding position.

Figure 9.6: Contributions to self-administered pension funds, 1992 to 2012

United Kingdom



Source: Office for National Statistics

Employee contributions were fairly flat for the entire period shown in Figure 9.6, 1992 to 2012. The stagnation of employee contributions in recent years may be associated with falling numbers of contributors. Active membership of private sector defined benefit schemes (which does not include members of the Local Government Pension Scheme) fell from 3.0 million in 2006 to 1.9 million in 2011, the latest year for which such figures are available².

Employer contributions grew strongly between 1999 and 2006. Normal contributions from employers rose from under £5 billion in 1992 to £25.5 billion in 2012. Employers' special contributions started to increase from 1999 and peaked at £13.2 billion in 2006, before falling to £11.9 billion in 2007 and £6.8 billion in 2008. In 2009, special contributions by employers rose to £10.0 billion and in 2012 they reached £19.4 billion.

Figures from [Investment by Insurance Companies, Pension Funds and Trusts](#) show that total contributions to defined benefit schemes are substantially higher than those to defined contribution schemes. Contributions to defined contribution schemes accounted for only 12% of normal contributions to self-administered pension funds in 2012, reflecting the small proportion of such schemes with self-administered funds. The position is different for insured occupational pension schemes (see [Glossary](#)), where most of the contributions are to defined contribution rather than defined benefit schemes (see [MQ5: Investment by Insurance Companies, Pension Funds and Trusts](#), specifically Reference Table 2.5).

The economic recovery in the second half of the 1980s and the mid-1990s contributed to a rise in self-administered pension funds' investment income (income from rents, dividends and interest, Figure 9.5). Income in this category fell from £21.3 billion in 1997 to £16.8 billion in 2003 before recovering to £22.4 billion in 2008, despite the onset of the recession. In 2012, it was £20.9 billion.

Periodically, transfer payments into pension funds have a significant impact on the total income of self-administered pension funds. These are payments made from one pension fund to another in lieu of benefits that have accrued to the transferring member or members to enable the receiving pension arrangement to provide alternative benefits. Transfers may occur when people change employers or when pension schemes are merged. They have become an important component of self-administered pension fund income since 1999. Transfers into pension funds peaked at £9.7 billion in 2006 before falling to £1.5 billion in 2008. In 2012, income from transfers into pension funds was £2.7 billion (Figure 9.5).

Notes for Fund income

1. Pension Protection Fund, [7800 Index](#), March 2013 update containing figures to end-February (see [References](#)).
2. [Occupational Pension Schemes Annual Report 2011, Chapter 3](#) (see [References](#)).

6 . Fund expenditure

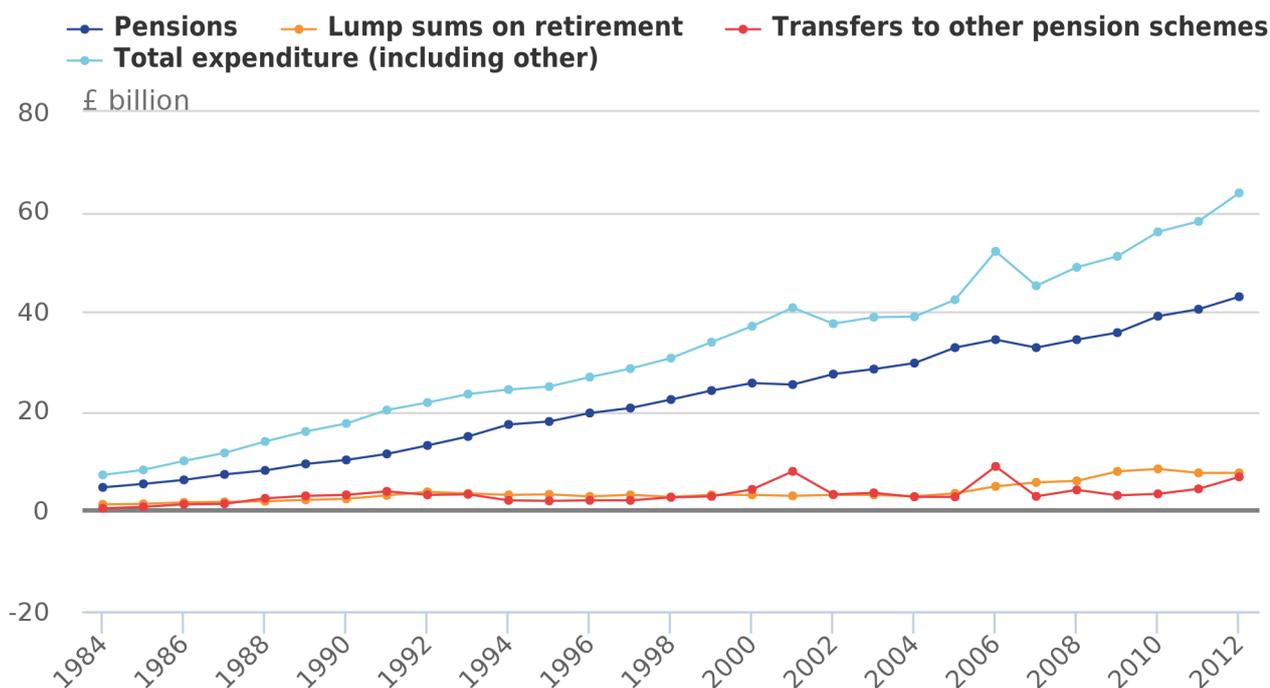
Most expenditure by self-administered pension funds is on regular pension payments (Figure 9.7). Since 1984, the amount spent on pensions has increased in most years. The upward trend is largely due to the impact of the increasing maturity of pension schemes, as employees who joined pension schemes in the 1950s and 1960s, a period when membership rose (see Pension Trends [Chapter 7](#)), enter retirement.

The way pension rights are increased to compensate for inflation (known as revaluation or indexation) also has an impact on pension funds' expenditure. Revaluation became compulsory in 1987 for pension rights accruing before retirement. For pensions in payment relating to contributions made from April 1997, Limited Price Indexation (LPI) applies. Under LPI, pensions had to be increased by 5% per year or by the increase in prices, whichever was less, until 2005, when the rate was changed to 2.5% or the increase in prices. In 2010, the government announced that indexation would, in future, be based on the Consumer Price Index (CPI) rather than the RPI. This change affects public sector pensions and some private sector pensions.

Self-administered pension funds' expenditure on pensions rose from £4.8 billion in 1984 to £25.7 billion in 2000 (Figure 9.7). After a slight decrease in 2001, growth resumed until 2006, when expenditure on pensions reached £34.4 billion. In 2007, expenditure fell by 5%, the first significant decrease since the beginning of the series. The fall was reversed in 2008, and expenditure on pensions reached £43.0 billion in 2012.

Figure 9.7: Self-administered pension fund expenditure, 1984 to 2012

United Kingdom



Source: Office for National Statistics

The other main components of pension fund expenditure are lump sums payable on retirement, death benefits, transfers to other pension schemes (outward transfers), and administrative costs. Expenditure on lump sums fluctuated around £3 billion from the mid-1990s until 2004, but then rose rapidly, reaching a peak of £8.5 billion in 2010. It then fell back to £7.7 billion in 2012.

Expenditure on outward transfers varied between 1984 and 2012, and mirrored trends in income from inward transfers. Since 1988, transfer payments have tended to range between £2 billion and £4 billion. However, they reached £8.0 billion in 2001 and £9.0 billion in 2006. In 2012, transfer payments were valued at £6.9 billion.

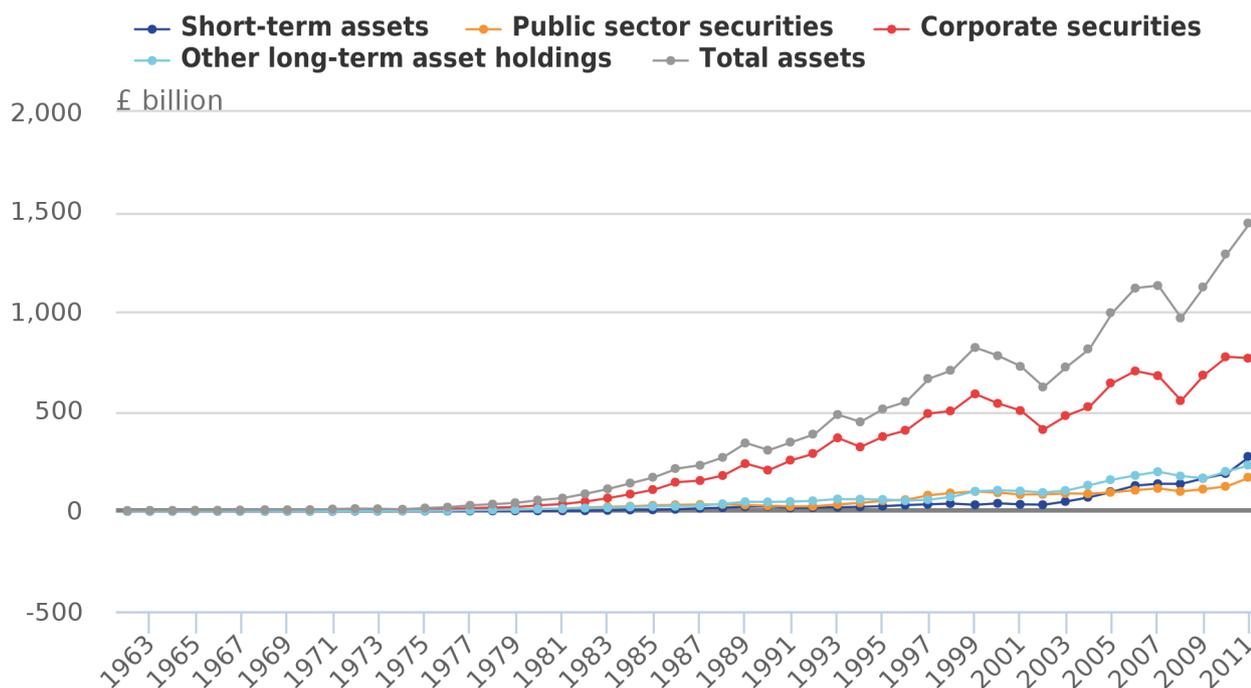
7 . Asset holdings

The final section in this chapter focuses on the investments made by self-administered pension funds on behalf of pension scheme members. It presents an overview of the funds' asset holdings as well as breakdowns by location of the investment (UK and overseas) and by type of investment. For asset holdings and investments, the latest year for which figures are available is 2011.

The overall composition of self-administered pension funds' asset holdings between 1986 and 2011 is shown in Figure 9.8. In 2011, long-term assets accounted for 81% (£1,169.1 billion) of total assets; short-term assets such as cash formed a small part of the total. Long-term assets consist of corporate securities, public sector securities and other long-term asset holdings, including fixed assets such as buildings, land and machinery, holdings in insurance-managed funds, and holdings of overseas government securities. Within the category of other long-term assets, a key growth area in recent years has been holdings of insurance-managed funds (where insurance companies offer participation in pooled funds). The value of holdings of these funds increased from around £20 billion in the mid-1990s to £103.6 billion in 2007. The recession in 2008–09 eroded their value, and they were worth £70.3 billion in 2009. Their value has recovered somewhat in 2011, reaching £93.8 billion.

Figure 9.8: Self-administered pension fund asset holdings at market values, 1986 to 2011

United Kingdom



Source: Office for National Statistics

Notes:

1. 'Other long-term asset holdings' comprise overseas government securities; loans and mortgages; fixed assets; holdings in insurance-managed funds; and other UK or overseas asset holdings. Property unit trust holdings, which used to be classified as 'other long-term asset holdings', has now been included in 'corporate securities'

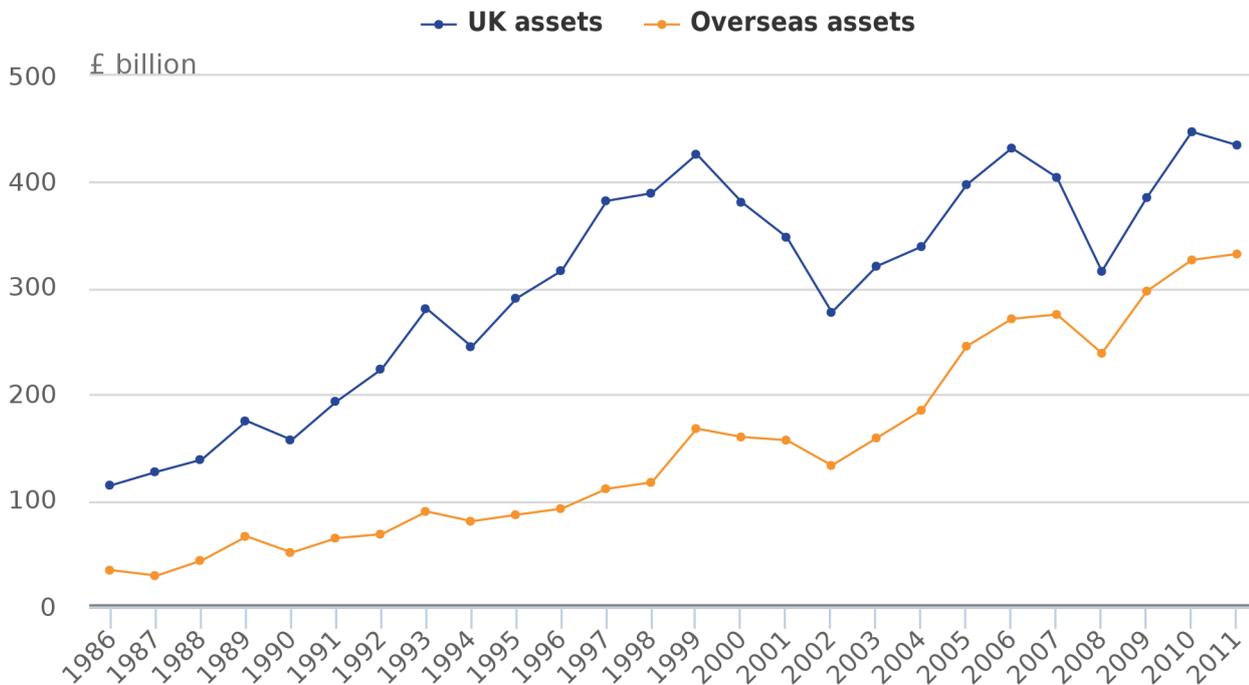
Changes in the UK stock market have a significant impact on the total value of pension fund assets. The growth in the market in the 1980s and 1990s led to significant increases in fund assets. The downturn in the stock market in 2000–03 decreased the value of pension fund investments. The value of pension fund assets fell from £820.9 billion in 1999 to £622.9 billion in 2002. Stock market growth, thereafter, contributed to raising the value of these assets to £1,131.1 billion in 2007, but in 2008 their value fell to £968.8 billion as stock markets fell at the start of the recession. The recovery in the UK stock market towards the end of 2009 increased the value of pension fund assets that year to £1,124.3 billion, reversing the fall in 2008. The value of these assets continued to increase in following years, reaching £1,444.0 billion in 2011.

Changes in the performance of stock markets can be seen in the 'corporate securities' category of asset holdings, comprising bonds issued by companies, company shares and mutual funds. For most of the 1990s, the value of investments in corporate securities accounted for over 70% of total assets held by self-administered pension funds. However, the proportion has fallen since then; in 2011, it was 53%. The value of self-administered pension funds' investment in corporate securities rose steadily throughout the 1980s and for most of the 1990s to reach a high of £588.3 billion in 1999. It fell sharply in the first years of the 21st century, but then recovered to reach a new high of £703.1 billion in 2006. After a fall in 2008, to £554.6 billion, the value of the funds' investment in corporate securities reached £774.1 billion in 2010. The increased holdings in mutual funds after 2008 were a key driver in the rise of holdings of corporate securities, which fed through to the increase in total assets during this period (Figure 9.10). Although the value of corporate securities decreased slightly in 2011, the other asset classes contributed to an overall increase in total assets.

Figure 9.9 shows self-administered pension funds' holdings of corporate securities broken down by whether the securities are located in the UK or overseas. Over time, the location of corporate securities in which the funds invest has shifted. The UK accounted for around three quarters of assets held in corporate securities for most of the 1990s. Since 1998, the proportion invested in UK company bonds, shares and mutual funds has steadily decreased and the proportion invested in their overseas equivalents has increased. In 2011, 57% (£434.9 billion) of the total was invested in the UK and 43% (£332.2 billion) overseas.

Figure 9.9: Self-administered pension fund holdings of corporate securities: by location of assets, 1986 to 2011

United Kingdom



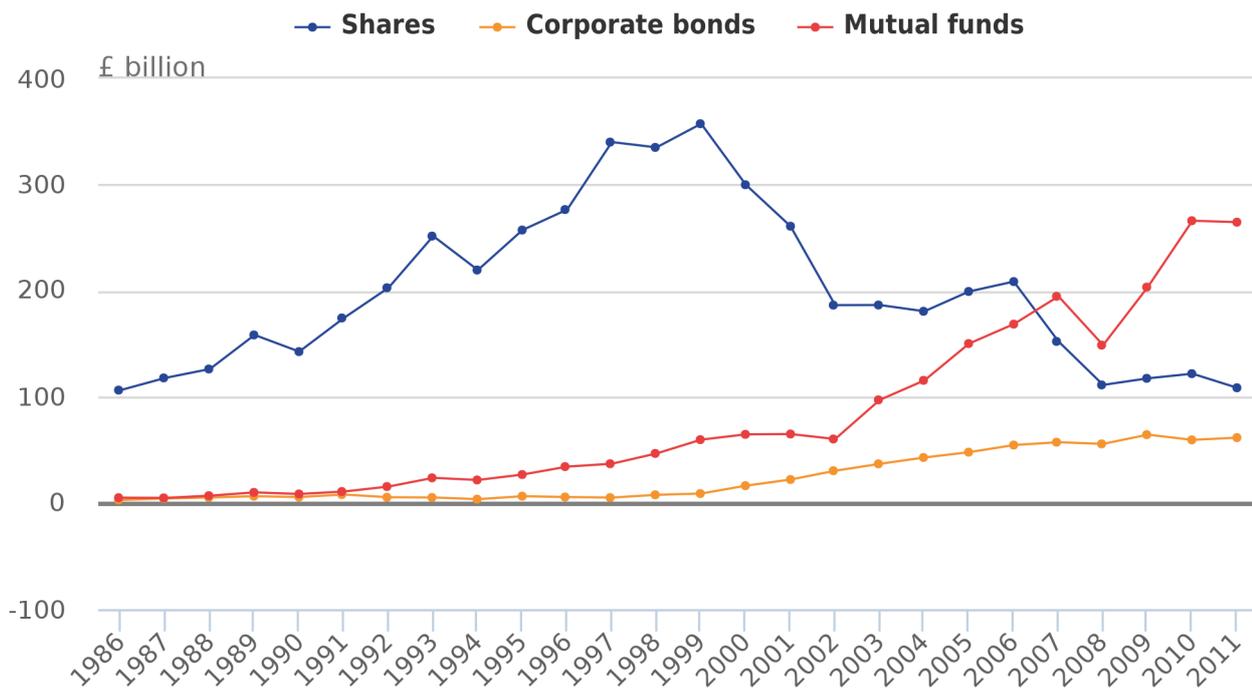
Source: Office for National Statistics

The composition of self-administered pension funds' investments in UK corporate securities has changed significantly from 1986 to 2011 (Figure 9.10). The proportion of assets invested in UK mutual funds rose from 4% of total investment in UK corporate securities in 1986 to 11% in 1996 and 22% in 2002. It then rose more rapidly, reaching 39% in 2006 and 61% in 2011.

The most marked increase in the level of mutual funds was after 2008, when the value of holdings stood at £148.8 billion. In 2009 and 2010, holdings in mutual funds increased to £203.5 billion and £266.1 billion respectively. They then fell slightly in 2011 to £264.7. The strong increases in 2009 and 2010 can be linked to rises in the UK authorised unit trusts, investment trusts, open ended investment companies, property unit trusts and 'other mutual funds' which make up the total mutual funds figure. The proportion of corporate assets held in mutual funds increased in every year after 2008.

Figure 9.10: Self-administered pension fund holdings of corporate securities: by type of UK asset, 1986 to 2011

United Kingdom



Source: Office for National Statistics

Notes:

1. Property unit trust holdings, which used to be classified as 'other long-term asset holdings' are now included in 'corporate securities: mutual funds'. The historical series has been revised

The proportion invested in company shares has fallen¹. In 1986, 93% of investment in UK corporate securities was in shares. This proportion fell slowly at first, to 87% in 1996, and then more rapidly, to 48% in 2006 and 25% in 2011.

Between 1986 and 2000, investment in UK company bonds remained flat, at under 5% of investment in UK corporate securities. It then rose, reaching 11% in 2002. It peaked at 18% in 2008, before falling to 14% in 2011. Figures in £ billion for each asset class for the entire period are available in the chart download.

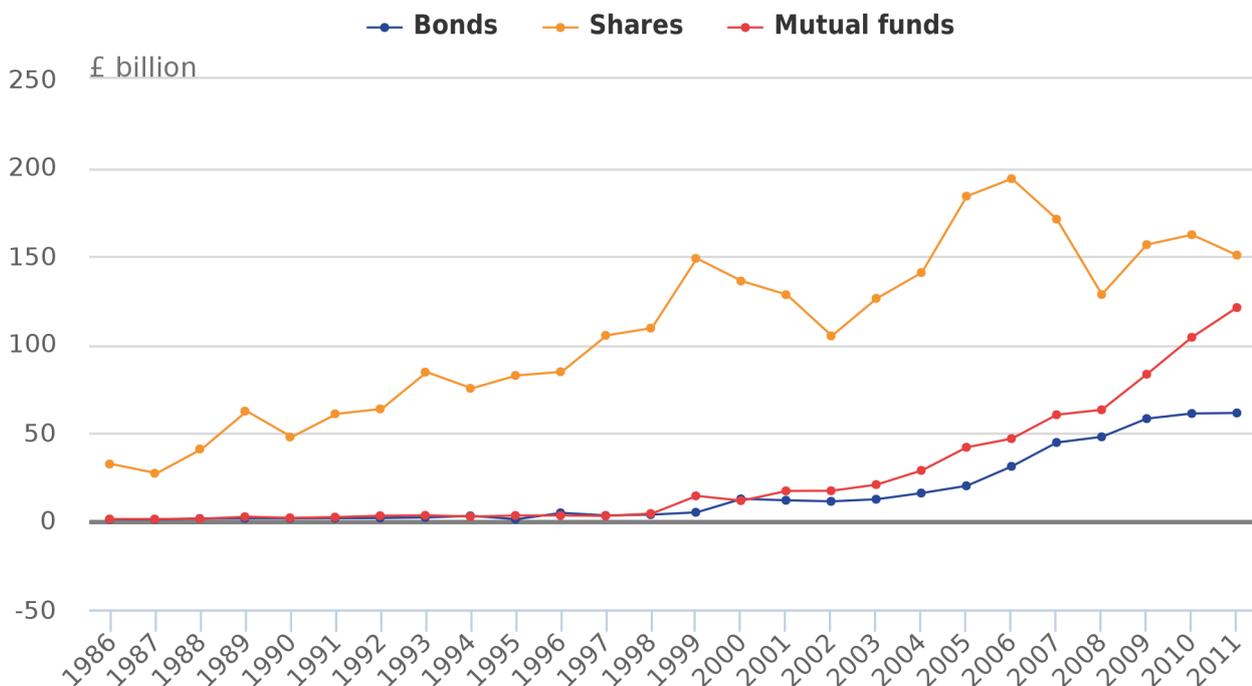
A number of factors may have encouraged self-administered pension funds to alter their asset allocations at the beginning of this century, giving greater weight to bonds. In addition to changes in the performance of equities, especially the stock market downturn of 2000–03, fund investment decisions may have been influenced by the maturing of defined benefit pension schemes and closures to new members, by changes to accounting standards for reporting pension scheme deficits with the introduction of [Financial Reporting Standard 17](#) (FRS17), and by the setting up of the Pension Protection Fund (PPF):

- as pension schemes mature, fund managers are likely to want to reduce exposure to equities and their associated risks, and move into bonds. Many private sector defined benefit schemes set up in the 1950s and 1960s have been maturing in recent years, and many are now closing to new members, further reducing the proportion of younger members (for whom a relatively high proportion of investment in shares is appropriate). The de-risking of investments as schemes mature may be part of broader liability driven investment (LDI) strategies, which construct investment portfolios to reflect the nature of schemes' liabilities²;
- FRS17 was introduced from 2001 and became mandatory from January 2005. It meant that pension schemes' funding positions had to be fully recognised on company balance sheets. If a defined benefit scheme moved suddenly into deficit because of a stock market downturn or a pronounced change in bond yields, this would affect the company's reported results. Therefore, some employers may have encouraged a shift in the asset allocation of pension funds associated with such schemes away from shares into less volatile assets such as bonds; and
- since 2006, most private sector defined benefit pension schemes have been subject to the PPF levy, which takes account of risk. It has been suggested that this provides an incentive for such schemes to shift their investments into lower-risk assets such as high-grade bonds. However, the formula used to calculate individual scheme levies does not, at present, take into account scheme-specific investment risk; only underfunding and insolvency risk of the sponsoring employer are used. From 2012/13, the PPF will take into account scheme-specific funding and investment risk as part of a move to a new framework³. PPF analysis suggests that the introduction of investment risk as a factor in the risk-based levy formula would not affect schemes' investment strategies to a significant degree.

Self-administered pension funds have also made changes to the composition of their overseas holdings of corporate securities (Figure 9.11). The changes have been similar to those seen in the UK holdings. In 1986, 94% of investment in overseas corporate securities was in shares; this fell to 92% in 1996, 71% in 2006 and 45% in 2011.

Figure 9.11: Self-administered pension fund holdings of corporate securities: by type of overseas asset, 1986 to 2011

United Kingdom



Source: Office for National Statistics

In the case of mutual funds, the increase in the proportion of the total invested in this type of asset overseas began later than for UK mutual funds, with the proportion remaining under 5% from 1986 to 1998, and then rising to 11% in 2001 and 17% in 2005. In 2011 it reached 36%.

The proportion of investment in overseas corporate securities held in company bonds remained relatively low between 1986 and 1999, but then rose to 8% in 2000 and to 20% in 2008. This proportion fell back to 18% in 2011. Until the 2011-12 levy year, the formula used to calculate individual scheme levies included just underfunding and insolvency risk of the sponsoring employer. From 2012-13, the formula will also include scheme-specific investment risk. Analysis carried out by the PPF in 2010 suggested that the introduction of investment risk would not affect schemes' investment strategies to a significant degree.

The chart download contains figures in £ billion for each overseas asset class for the entire period. Further information on the allocations of other asset classes, such as property, hedge funds and splits of gilts into conventional and index-linked gilts can be found in [Purple Book: Chapter 7](#).

Notes for Asset holdings

1. It should be noted that, although the proportion invested in shares has fallen, mutual funds often invest heavily in shares.
2. The [Purple Book 2010](#), Chapter 12: Section 12.6.
3. The PPF implemented a new levy framework from 2012/13 which includes funding and scheme-specific investment risk in the formula used to calculate the risk-based levy. Analysis carried out the PPF in 2010 suggested that the introduction of investment risk would not affect schemes' investment strategies to a significant degree. See PPF (2012): [A Guide to the Pension Protection Levy 2012/13](#).

8. References

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9. Background notes

1. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.