Merchant Navy Ratings Pension Fund

Actuarial valuation as at 31 March 2017

14 June 2018

willistowerswatson.com

Summary

The main results of the Fund's actuarial valuation are as follows:

- Technical provisions funding level as at 31 March 2017 has increased to 84% (2014: 67%)

- Deficit of assets (excluding escrow account) relative to technical provisions has decreased to £221 million (2014: £354 million)

- The recovery plan implemented to address the Fund's funding deficit is expected to achieve full funding on the technical provisions assumptions by 31 March 2024, which is 7 years following the valuation date (2014: 10 years)

- The Scheme Actuary's statutory estimate of solvency as at 31 March 2017 has increased to 73% (2014: 55%)

Contents

Throughout this report the following terms are used:

Fund
Merchant Navy Ratings Pension Fund

Trustee
Merchant Navy Ratings Pension Fund Trustees Limited

Employers
Participating Employers, as defined in the Trust Deed & Rules

Trust Deed & Rules
The Fund's Trust Deed & Rules dated 1 August 2007 (as subsequently amended)

Introduction

Scope

This report is the actuarial valuation of the Merchant Navy Ratings Pension Fund as at 31 March 2017 and I have prepared it for the Trustee. As noted in the Limitations section of this report, others may not rely on it.

The actuarial valuation is required under the terms of Clause 25 of the Trust Deed & Rules and Part 3 of the Pensions Act 2004; a copy of this report must be provided to the Employers within seven days of its receipt.

The main purposes of the actuarial valuation are to review the financial position of the Fund relative to its statutory funding objective and to determine the appropriate level of future contributions.

The report explains the financial position of the Fund at 31 March 2017 using several different measures of its liabilities and how it has changed since the previous valuation at 31 March 2014. It also describes the strategy that the Trustee has adopted (following consultation with the Employers) for financing the Fund in future.

This report and the work involved in the actuarial valuation are within the scope of and comply with the Financial Reporting Council's Technical Actuarial Standards 100: Principles for Technical Actuarial Work and 300: Pensions.

Next steps

The Trustee is required to disclose to members, in a summary funding statement, certain outcomes of this actuarial valuation within a reasonable period. Members may also request a copy of this report.

The financial position of the Fund and the level of Employer contributions to be paid will be reviewed at the next actuarial valuation, which is expected to be carried out at 31 March 2020.

In intervening years the Trustee will obtain annual actuarial reports on developments affecting the Fund's assets and technical provisions. The next such report, which will have an effective date of 31 March 2018, must be completed by 31 March 2019.

Simon Eagle
Fellow of the Institute and Faculty of Actuaries
Towers Watson Limited, a Willis Towers Watson Company
14 June 2018

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http://eutct.internal.towerswatson.com/clients/615249/mnrpftrval31mar17/documents/MNRPF valuation report 31 March 2017.docx

Limitations

Third parties

This report has been prepared for the Trustee for the purpose indicated. It has not been prepared for any other purpose. As such, it should not be used or relied upon by any other person for any other purpose, including, without limitation, by individual members of the Fund for individual investment or other financial decisions, and those persons should take their own professional advice on such investment or financial decisions. Neither I nor Towers Watson Limited accepts any responsibility for any consequences arising from a third party relying on this report.

Except with the prior written consent of Towers Watson Limited, the recipient may not reproduce, distribute or communicate (in whole or in part) this report to any other person other than to meet any statutory requirements.

Data supplied

The Trustee bears the primary responsibility for the accuracy of the information provided, but will, in turn, have relied on others for the maintenance of accurate data, including the Employers who must provide and update certain membership information. Even so it is the Trustee's responsibility to ensure the adequacy of these arrangements. I have taken reasonable steps to satisfy myself that the data provided is of adequate quality for the purposes of the investigation, including carrying out basic tests to detect obvious inconsistencies. These checks have given me no reason to doubt the correctness of the information supplied except where stated in the Membership Data section of this report. It is not possible, however, for me to confirm that the detailed information provided, including that in respect of individual members and the asset details, is correct.

This report has been based on data available to me as at the effective date of the actuarial valuation and takes no account of developments after that date except where explicitly stated otherwise.

Some of the member data (such as date of birth and salary) required for the running of the Fund, including for paying out the right benefits, is known as ‘personal data’. The use of this data is regulated under the Data Protection Act, which places certain responsibilities on those who exercise control over the data (known as ‘data controllers’ under the Data Protection Act). Data controllers would include the Trustee of the Fund and may also include the Scheme Actuary and Towers Watson Limited, so we have provided further details on the way we may use this data on our website at https://www.towerswatson.com/en-GB/How-Towers-Watson-uses-personal-data-when-providing-actuarial-services-to-UK-pension-scheme-trustees.

Assumptions

The choice of long-term assumptions, as set out in the Fund’s Statement of Funding Principles dated 14 June 2018, is the responsibility of the Trustee, after taking my advice. They are only assumptions; they are not predictions and there is no guarantee that they will be borne out in practice. In fact I would expect the Fund’s experience from time to time to be better or worse than that assumed. The Trustee and the Employers must be aware that there are uncertainties and risks involved in any course of action they choose based on results derived from these assumptions.

The funding of the Fund is subject to a number of risks and it is not possible to make an allowance for all such risks in providing our advice. Unless stated, no explicit allowance has been made for any particular risk. In particular, no explicit allowance has been made for climate-related risks.

Funding

Statutory funding objective

The Trustee's only formal funding objective is the statutory funding objective under the Pensions Act 2004, which is to have sufficient and appropriate assets to cover the Fund's technical provisions.

The technical provisions are calculated by projecting the benefits (which are mostly pension payments) expected to be paid in each year after the valuation date and then discounting the resulting cashflows to obtain a present value. The main benefits taken into account in this actuarial valuation are summarised in the Additional Information section of this report.

The projections allow for benefit payments being made from the Fund over the next 80 or so years. Some of these payments depend on future increases in price inflation statistics subject to specified limits.

The method and assumptions for calculating the technical provisions as at 31 March 2017 have been determined by the Trustee and are documented in the Statement of Funding Principles dated 14 June 2018.

The table below summarises the main assumptions used to calculate the Fund's technical provisions for this and the previous actuarial valuation.

Financial assumptions	**31 March 2017 % pa**	31 March 2014 % pa
Discount rate*:		
- Initial margin over gilt yields	**1.8**	1.27
- Long term margin over gilt yields	**0.5**	nil
- Ultimate margin over gilt yields	**0.4**	nil
- Single equivalent discount rate (nominal)	**2.5**	4.05
Price inflation (RPI):	**3.4**	3.5
Price inflation (CPI):	**2.4**	2.5
In-service revaluation:		
- Section 148	**4.4**	4.5
- LPI7 (RPI max 7%)	**3.4**	3.5
Deferred pension revaluation (CPI max 5%)	**2.4**	2.5
Pension increases:		
- Post-1997 pension (RPI max 5%)	**3.4**	3.5
- Post-1988 GMP (CPI max 3%)	**2.4**	2.5
- Other pension	**nil**	nil

* For the 2017 valuation, the initial margin is assumed to hold until 2020 after which the margin will decrease uniformly to the long term margin by 2027 before dropping to the ultimate margin. For the 2014 valuation, the margin was assumed to decrease uniformly to nil over the period to 2034.

Other financial assumptions	**31 March 2017**	31 March 2014
Expense reserve	**£47 million**	4% of benefit liability value
GMP equalisation reserve	**£20 million**	nil

Demographic assumptions	31 March 2017	31 March 2014
Mortality – base tables at valuation date:		
- Male normal health pensioners	**S2IMA with 89% multiplier**	S2IMA with 89% multiplier
- Female normal health pensioners	**S2IFA with 70% multiplier**	S2IFA with 70% multiplier
Mortality – future improvements	**CMI 2013 with long term rate of improvement of 1.6% pa**	CMI 2013 with long term rate of improvement of 1.6% pa
Mortality loading	**Include following loadings to projected benefit cashflows:** - **-1% up to 2027** - **+3% for pensioners post-2027** - **+4% for deferreds post-2027**	No loadings for mortality
Pension exchanged for a lump sum at retirement	**25% of pensions, at 10% saving vs funding liability value**	25% of pensions, at 10% saving vs funding liability value

The table below compares the Fund's technical provisions as at the date of the actuarial valuation (31 March 2017) with the market value of the Fund's assets and the corresponding figures from the previous actuarial valuation:

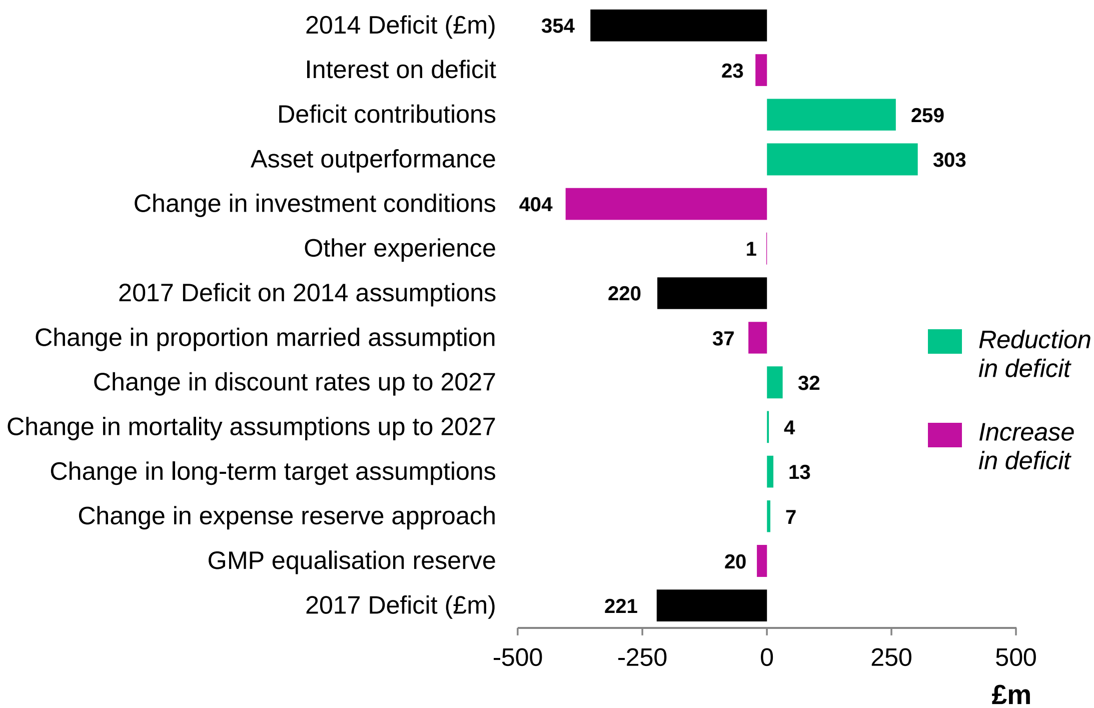
Valuation statement	31 March 2017 £m	31 March 2014 £m
Amount required to provide for the Fund's liabilities in respect of:		
Employee members	**74**	67
Deferred pensioners	**663**	516
Pensioners and dependants	**570**	438
GMP equalisation reserve	**20**	-
Expenses	**47**	41
Technical provisions	**1,374**	1,062
Market value of assets	**1,153**	708*
'Gross' past service (deficit)/surplus (technical provisions less assets)	**(221)**	(354)
Funding level (assets ÷ technical provisions)	**84%**	67%*
Value of future deficit contributions due after valuation date from 2014 valuation on estimates at date of signing this report	**132**	-
'Net' past service (deficit)	**(89)**	(354)

*Excluding escrow of £29 million, which was paid into the Fund in March 2015

Note that since the valuation date it has emerged that there is uncertainty regarding the rights of certain members to ill-health enhanced early retirement pensions since 1991. The Trustee has been advised to seek the directions of the Court over these issues. It is possible that their determination may lead to a substantial increase in the Fund's liabilities. These potential benefit liabilities are not included in the valuation results as at 31 March 2017 as at the time of finalising the valuation their scope is unknown pending further investigation and determination.

Developments since the previous valuation

The funding level has increased to 84% from 67% at the previous valuation, mainly due to the substantial deficit contributions received since the Trustee implemented the new deficit contribution regime following conclusion of the 2015 court case. The main factors contributing to this increase are shown below.



Contribution requirements

As there were insufficient assets to cover the Fund's technical provisions at the valuation date, the Trustee is required to put a recovery plan in place. This specifies how, and by when, the statutory funding objective is expected to be met.

The Trustee has determined following consultation with the Employers a recovery plan such that:

- in addition to the outstanding contributions required under the 2014 recovery plan, the Employers will pay further contributions to the Fund of value as at 31 March 2017 as required, currently estimated at £89 million, over a recovery period to 31 March 2024; and

- each Employer will have an individual payment plan to meet their share of the 2017 net deficit, which will be determined in accordance with the Trustee's Implementation Methodology for the deficit collection regime.

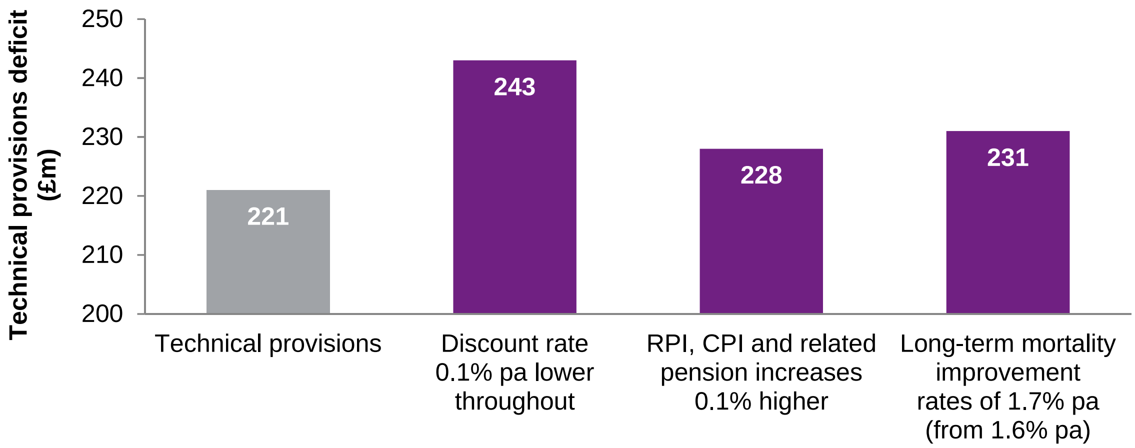
If the assumptions documented in the Statement of Funding Principles are borne out in practice, and investment returns over the period are in line with the discount rates assumed for the purpose of calculating the technical provisions, the scheduled contributions would be sufficient to remove the deficit by 31 March 2024.

In addition, the Employers will pay 2% of MNRPP Pensionable Salaries each month for those Employee Members who continue to be entitled to revaluation of benefits in line with Section 148 orders, as required under Rule 5 of the Trust Deed and Rules.

Projections and sensitivities

Based on the assumptions underlying the calculation of the Fund's technical provisions as at 31 March 2017 and allowing for contributions to be paid to the Fund as described above, the funding level is expected to increase to 100% by the end of the recovery period.

The chart below illustrates the sensitivity of the technical provisions as at 31 March 2017 to variations of individual assumptions. (If more than one of these assumptions is varied, the effect may be greater than the sum of the changes from varying individual assumptions.)



Solvency

Discontinuance

In the event that the Fund is discontinued, Employee Members would become deferred pensioners in the Fund with no further entitlement to LPI7 revaluation or Section 148 revaluation on their accrued benefits.

If the Fund was wound up, the Employers would ultimately be required to pay to the Fund any deficit between the Scheme Actuary's estimate of the full cost of securing Fund benefits with an insurance company (including expenses) and the value of the Fund's assets – the "employer debts" (which may be either statutory debts or scheme debts which the Trustee can levy under the new regime). The amount of any employer debts that would actually be received would depend on the ability of the Employers to pay what could be a substantial sum of money. The Trustee would then normally try to buy insurance policies to secure future benefit payments.

Hypothetically, if the Fund's discontinuance is a result of the insolvency of the last employer, the employer's debt would be determined as above and the Fund would also be assessed for possible entry to the Pension Protection Fund ("PPF").

If the assessment concluded that the assets (including any funds recovered from the Employers) were not sufficient to secure benefits equal to the PPF compensation then the Fund would be admitted to and members compensated by the PPF. Otherwise the Fund would be required to secure a higher level of benefits with an insurance company.

Statutory estimate of solvency

The Pensions Act 2004 requires that I provide the Trustee with an estimate of the solvency of the Fund at the valuation date. Normally, this means an estimate of the proportion of the accrued benefits that could have been secured by buying insurance policies with the assets held by the Fund at the valuation date. For this purpose I have assumed that no further payments are received from the Employers.

I have assumed that the insurance company price would be calculated on an actuarial basis similar to that implied by bulk annuity quotations seen by Willis Towers Watson at around the valuation date. I have assumed the cost of implementing the winding-up to be in line with the cost set by the PPF for Section 179 valuations, leading to assumed winding-up costs of £38 million.

The table below summarises how the main assumptions used to estimate the Fund's solvency position at this and the previous actuarial valuation differ from the assumptions used to calculate the technical provisions liabilities. The individual assumptions below are not necessarily consistent with those underlying bulk annuity quotations, but the overall liability values are.

Financial assumptions	**31 March 2017 % pa**	31 March 2014 % pa
Pensioner discount rate	**Gilts + 0.3% pa**	Gilts – 0.1% pa
Non-pensioner discount rate	**Gilts – 0.35% pa**	Gilts – 0.5% pa
Price inflation (CPI)	**2.7**	3.2

Demographic assumptions	**31 March 2017**	31 March 2014
Mortality – base tables at valuation date:	**S2IMA/S2IFA with best fit multipliers**	As Technical Provisions
Mortality – future improvements:	**CMI 2014 with a long term rate of 1.5% pa**	CMI 2013 with a long term rate of 1.5% pa
Pension exchanged for a lump sum at retirement	**0%**	0%

My estimate of the solvency position of the Fund as at 31 March 2017 is that the assets of the Fund would have met 73% of the cost of buying insurance policies to secure the benefits at that date, based on the assumptions described above. Further details are set out in the table below alongside the corresponding details as at the previous valuation date:

Valuation statement	31 March 2017 £m	31 March 2014 £m
Total estimated cost	**1,573**	1,282
Market value of assets	**1,153**	708
Solvency (deficit)/surplus (total estimated cost less assets)	**(420)**	(574)
Solvency level (assets ÷ total estimated cost)	**73%**	55%

The change in the solvency level from 55% to 73% is due mainly to the receipt of deficit contributions from Employers, the investment performance of the Fund's assets being better than assumed, and an improvement in insurance company pricing.

The solvency estimate should not be relied upon to indicate the position on a future winding-up. Changes in market interest rates and in the supply and demand for annuities mean that the actual position at any particular point in time can be established only by obtaining specific quotations for buying the insurance policies required to secure the benefits.

The coverage for particular benefits depends on where they fall in the statutory priority order below. However, money purchase liabilities, such as those arising from members' Additional Voluntary Contributions (AVCs), are excluded from the statutory priority order; their treatment is determined by the Fund's own rules and would normally be that they are secured in full before any other benefits.

- category 1 – benefits relating to certain pension annuities secured by the Fund before 6 April 1997 (of which I understand there are none for the Fund);
- category 2 – the cost to the Fund of securing the compensation that would otherwise be payable by the PPF if the Employers became insolvent;
- category 3 – benefits in respect of defined benefit AVCs not dealt with above;
- category 4 – all other pensions and benefits due under the Fund, including pension increases (where these exceed those under the PPF).

As the Fund assets did not cover the Section 179 liabilities as at 31 March 2017, the Fund would probably have qualified for entry to the PPF had there been no solvent Employers at 31 March 2017, in which case the members would have received PPF compensation in place of their benefits.

Relationship between the cost of securing benefits and the technical provisions

My estimate of the cost of securing benefits with an insurance company of £1,573 million is £199 million higher than the Fund's technical provisions of £1,374 million.

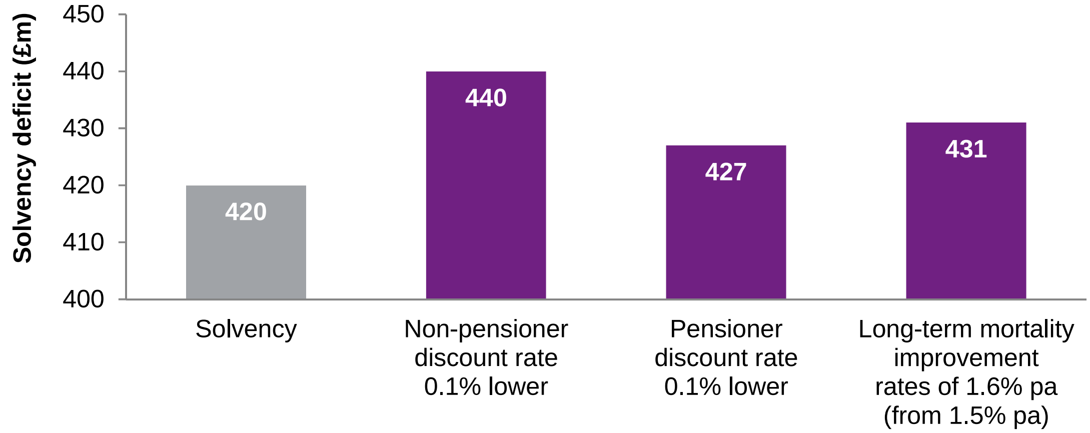
The technical provisions are intended to be a prudent assessment of the assets required under the Fund's investment strategy to meet future benefit payments as and when they fall due but with reliance placed on the Employers being able to support the Fund in future if the assumptions are not borne out in practice. By contrast the estimated cost of securing benefits with an insurance company is based on the price that an insurer might be likely to charge to take on the risks associated with operating the Fund without having recourse to future contributions from the Employers.

If the statutory funding objective had been exactly met on 31 March 2017 (ie there had been no funding surplus or deficit), I estimate that the solvency level of the Fund would have been 87%. This compares with 83% at the 31 March 2014 actuarial valuation.

Projections and sensitivities

Based on the assumptions underlying the calculation of the Fund's technical provision as at 31 March 2017 and allowing for contributions to be paid to the Fund summarised in the Funding section of this report and on projected timing of the contributions, the solvency level is projected to increase from 73% to 87% by the expected date of the next actuarial valuation (31 March 2020).

The chart below illustrates the sensitivity of the solvency position as at 31 March 2017 to variations of individual key assumptions. (If more than one of these assumptions is varied, the effect may be greater than the sum of the changes from varying individual assumptions.)



Additional Information

Risks

The table below summarises the main risks to the financial position of the Fund and the actions taken to manage them:

Risk	Approach taken to risk
Employers unable to pay contributions or make good deficits in the future	At each valuation the Trustee takes advice from an independent specialist on the ability of the Employers as a whole to pay contributions to the Fund and, in particular, to make good any shortfall that may arise if the experience of the Fund is adverse. This advice is taken into account when determining the level of prudence within the technical provisions and recovery plan to remove a deficit relative to the technical provisions. Under the new regime, the Trustee will require covenant assessments and credit support arrangements to be in place for individual employers to allow them to spread their contributions over more than two instalments. Amounts which are demonstrably unaffordable within the recovery period will be respread to other employers.
Investment returns could be insufficient to meet the Trustee's funding objectives	The Fund currently hedges most of its exposure to changes in interest rates. Also, the Trustee takes advice from the Scheme Actuary on possible assumptions for future investment returns. For the calculation of the Fund's technical provisions, the Trustee has adopted discount rates that are lower than the expected returns on the Fund assets. The Trustee may increase the contributions due by the Employers at subsequent valuations if future returns prove insufficient.
Price inflation could be different from that assumed which could result in higher liabilities	The Fund currently hedges most of its exposure to inflation risk. Also, the Trustee invests in assets that are expected to be correlated to future inflation in the longer term (sometimes referred to as "real" assets). This means that, over the longer term, such assets are expected to keep pace with inflation. Such assets include equities, property and index-linked bonds.
Falls in asset values might not be matched by similar falls in the value of the Fund's liabilities	The Trustee considers this risk when determining the Fund's investment strategy. The Fund currently hedges most of its exposure to changes in interest rates. To the extent that such falls in asset values result in deficits at future valuations, the Trustee would adopt a further recovery plan to restore full funding over a period of time.
Increases in buy-out pricing means Journey Plan target is insufficient to buy out liabilities	The Trustee takes advice from the Scheme Actuary on expected buy-out pricing and reflects a prudent allowance for this in the technical provisions and Journey Plan. The Trustee will review the assumptions periodically and adjust the funding targets if required.
Fund members live longer than assumed	For the calculation of the technical provisions, the Trustee has adopted mortality assumptions that it regards as prudent estimates of the life expectancy of members so that higher reserves are targeted in respect of the risk than are expected to be necessary. If life expectancy increases more than assumed, the Trustee can increase contributions due from the Employers to meet the additional pension liabilities. The Trustee could also consider hedging the longevity risk if the market terms are considered attractive.
Options exercised by members could lead to increases in the Fund's liabilities	The Trustee sets the terms for converting benefits in respect of member options on the basis of actuarial advice with the view to avoiding strains on the Fund's finances as far as is reasonably possible without disadvantaging members. The terms are kept under regular review, generally following each actuarial valuation.
Legislative changes could lead to increases in the Fund's liabilities	The Trustee takes legal and actuarial advice on changes in legislation.

Economic risk | Demographic risk | Legal risk

Benefits summary

The Fund is a registered pension scheme under the Finance Act 2004 and was contracted-out of the State Second Pension until 31 May 2001. The benefits payable to members of the Fund as at 31 March 2017 are described in the Trust Deed and Rules dated 1 August 2007 as subsequently amended.

The main provisions of the Fund according to its Rules are summarised as follows:

Normal Pension Age (NPA):	Age 62 for most men and women.
Pensionable salary:	
- for ARPS	The cash emoluments received by a member in a Fund Year less 1½ times the Lower Earnings Limit applicable to that Fund Year.
- for 98RPS	The cash emoluments received by a member in a Fund Year less the Lower Earnings Limit applicable to that Fund Year.
Average Revalued Pensionable Salary (ARPS):	Calculated by adding together each Fund Year's Pensionable Salary on or before 31 May 2001, with each year's salary revalued: - with Section 148 Orders as an Active Member up to 31 May 2001; and then - as an Employee Member, with 'LPI7 Revaluation' or Section 148 Orders depending on the option chosen by the member in 2001. The total is then divided by the number of years of service before 31 May 2001.
1998 Revalued Pensionable Salary (98RPS):	Calculated as for ARPS, but over the period 1 February 1998 to 31 May 2001 only.
LPI7 revaluation:	Revaluation for the period as an Employee Member after 31 May 2001 in line with retail price inflation subject to a maximum of 7% per annum over the whole period.
Service:	Service as a contributing member of the Fund up until 31 May 2001.
Pre-1978 Pension Benefits:	Additional pension benefits granted to Members in respect of service prior to 6 April 1978, subject to certain qualifying conditions being satisfied.
Retirement at NPA:	A pension equal to the total of: - one-sixtieth of ARPS for each year of service prior to 1 February 1998; - one-eightieth of 98RPS for each year of service between 1 February 1998 and 31 May 2001; and - the member's Pre-1978 Pension Benefit.
Retirement before NPA:	An immediate pension calculated as for retirement at NPA but reduced to reflect early payment, if the Trustee gives its consent.
Lump sum at retirement:	On retirement part of the pension may be exchanged for a lump sum ('commutation').
Death after retirement:	A spouse's pension of 50% of the pension which would have been in payment at the date of death if no pension had been commuted for a lump sum at retirement, plus a lump sum if death occurs within 5 years of retirement.
Death before retirement:	A dependant's pension equal to 50% of the member's pension with increases to the date of death.
Leaving service:	A deferred pension or transfer value. The pension is increased between retirement and NPA in line with statutory requirements.

Pension increases:	The pension is increased in payment as follows: - no guaranteed increases to non-GMP benefits accrued prior to 1 April 1997. - guaranteed increases in line with retail price inflation up to a maximum of 5% each year to benefits accrued after 31 March 1997. - GMPs accrued from 6 April 1988 receive statutory increases.

Discretionary benefits

There is a long-standing practice for increases in deferment above statutory requirements for members who left service from 1986 to 1990, and this is allowed for within the technical provisions.

Other than this, the Fund has no recent practice of making discretionary increases to benefits and the calculation of the technical provisions and statutory estimate of solvency does not allow for any advance provision for the granting of such discretionary benefit increases.

Changes to the benefits

Since the valuation as at 31 March 2014 no changes have been made to the Fund's benefits.

Uncertainty about the benefits

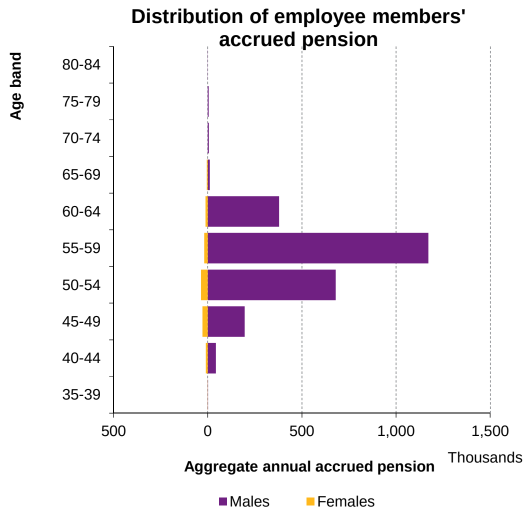
An allowance of £20 million has been made in the calculation of the technical provisions and statutory estimate of solvency as an estimate for the possible changes to the benefits that may be required to ensure that the Fund provisions in respect of Guaranteed Minimum Pensions do not unlawfully discriminate between male and female members.

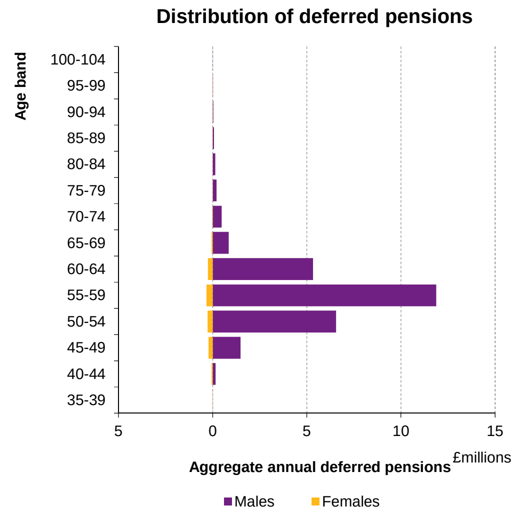
As mentioned in the funding section of this report, there is also currently some uncertainty regarding the rights of certain members to ill-health enhanced early retirement pensions since 1991, and a rectification exercise might be required. At this stage the scope is unknown pending further investigation, so no allowance has been made in the valuation results as at 31 March 2017 for the potential additional benefit liability.

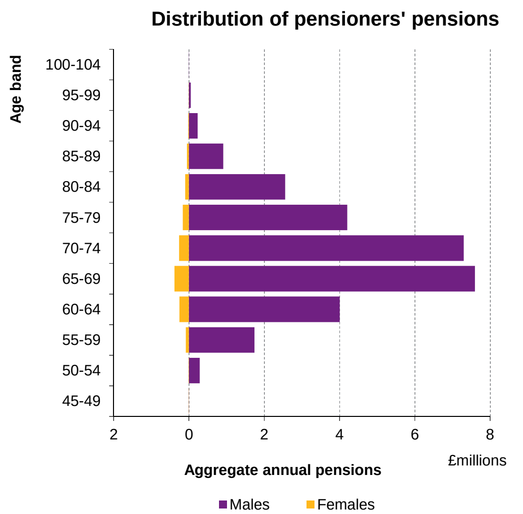
Membership data

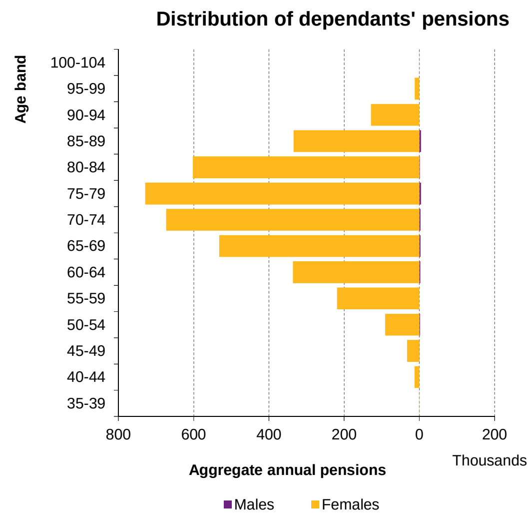
Population pyramids

A graphical summary of the Trustee's membership information supplied by the Fund's administrator is shown below.









Notes on data charts:

- Deferred pension amounts include revaluation to the valuation date.
- Pension amounts in payment include the increases granted to post '97 pensions and post '88 GMPs in April 2017.
- An administrative exercise is underway to trace deferred pensioners over Normal Pension Age who have not yet claimed their benefits.

A summary of the data provided for this and the previous valuation is presented below.

Number of members

Number	31 March 2017			31 March 2014		
	Males	**Females**	**Total**	Males	Females	Total
Employee members	**491**	**49**	**540**	666	60	726
Deferred pensioners	**14,486**	**849**	**15,335**	16,537	939	17,476
Pensioners	**7,118**	**562**	**7,680**	6,955	540	7,495
Dependants	**22**	**2,114**	**2,136**	23	2,119	2,142
Total	**22,117**	**3,574**	**25,691**	24,181	3,658	27,839

Annual pension

£'000	31 March 2017			31 March 2014		
	Males	**Females**	**Total**	Males	Females	Total
Employee members	**2,494.8**	**112.5**	**2,607.3**	3,665.1	133.8	3,798.9
Deferred pensioners	**25,884.0**	**1,143.7**	**27,027.7**	29,087.6	1,253.3	30,340.8
Pensioners	**29,069.8**	**1,336.7**	**30,406.5**	26,228.1	1,176.9	27,405.0
Dependants	**21.6**	**3,704.9**	**3,726.5**	21.1	3,381.9	3,403.0

Average age

Years	31 March 2017			31 March 2014		
	Males	**Females**	**All**	Males	Females	All
Employee members	**55.6**	**52.3**	**55.5**	54.4	50.7	54.3
Deferred pensioners	**56.3**	**54.4**	**56.2**	54.5	52.8	54.4
Pensioners	**70.4**	**69.9**	**70.4**	69.5	68.9	69.5
Dependants	**71.6**	**73.4**	**73.4**	69.3	71.6	71.6

Notes on data tables:

- For members with benefits from more than one period of service, "Number" reflects the number of separate service period records.
- For Employee Members who also have deferred benefits from earlier periods of service, those deferred records have been included within "Deferred Pensioners"
- Deferred pension amounts include revaluation to the valuation date.
- Pension amounts in payment include the increases granted to post '97 pensions and post '88 GMPs in the April immediately following the valuation date.
- Average ages are weighted by pension amount.

Comments on data quality

We understand that the Guaranteed Minimum Pension (GMP) data provided was unreliable for deferred pensioners who ceased to contract-out before 6 April 1985 or for whom only GMP liability remains in the Fund. We have therefore valued approximate amounts in respect of the GMP for these members which we have calculated using a similar method to previous valuations based on the earnings history data provided.

In addition, we understand that the spouse's pension and step-up at GMP vesting age amounts provided in respect of the current pensioners were unreliable. We have therefore valued spouse's pension amounts which we have estimated based on other estimates of the data.

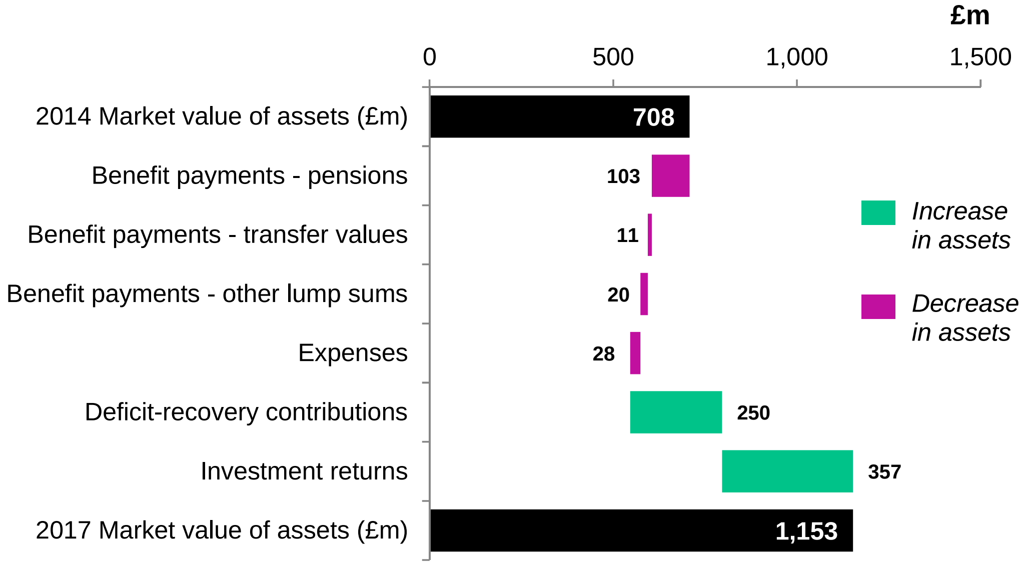
We consider these approximations to be adequate for the purposes of this valuation.

Asset information

Movements in the market value of assets

The audited accounts supplied as at 31 March 2017 show that the market value of the Fund's assets was £1,153 million.

The change in the Fund's assets (excluding AVCs and the escrow account) from £708 million as at 31 March 2014 to £1,153 million as at 31 March 2017 is detailed in the Trustee's Report and Financial Statements over that period. The chart below summarises a broad reconciliation of the change:



Investment strategy

The assets (excluding AVCs and the escrow account) were invested as summarised below as at 31 March 2017:

	Market value as at 31 March 2017	
	£m	%
Equities	138	12%
Alternative betas	91	8%
Alternative credit	108	9%
Hedge funds	137	12%
Private markets	79	7%
Investment grade credit	104	9%
Liability hedging	458	40%
Liquidity	38	3%
Total	**1,153**	**100%**

Statutory Certificate

Actuarial certification for the purposes of regulation 7(4)(a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005

Name of scheme: **Merchant Navy Ratings Pension Fund**

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Fund's technical provisions as at 31 March 2017 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Fund and set out in the Statement of Funding Principles dated 14 June 2018.

S Eagle

Simon Eagle
Fellow of the Institute and Faculty of Actuaries
Towers Watson Limited, a Willis Towers Watson Company
14 June 2018

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Glossary

This glossary describes briefly the terminology of the regime for funding defined benefit pension schemes as introduced by the Pensions Act 2004.

Actuarial report: A report prepared by the Scheme Actuary in years when an actuarial valuation is not carried out that provides an update on developments affecting the Fund's assets and technical provisions over the year.

Actuarial valuation: A report prepared by the Scheme Actuary that includes the results of the calculation of the technical provisions based on the assumptions specified in the Statement of Funding Principles and assesses whether the assets are sufficient to meet the statutory funding target.

Contingent asset: An arrangement separate from the assets already held by the trustees under trust (or agreed and documented in the schedule of contributions) that provides for the trustees to receive certain assets should certain pre-defined events take place.

Covenant: This represents the employers' combined legal obligation and ability to provide the financial support to a scheme that may be required now and in the future. The trustees' assessment of the sponsors' covenant will inform both investment and funding decisions.

Demographic assumptions: Assumptions relating to social statistics for Fund members, which can affect the form, level or timing of benefits members or their dependants receive. This can include levels of mortality experienced by the Fund and the proportion of members electing to exercise benefit options.

Discount rates: Assumptions used to place a capital value at the valuation date on projected future benefit cash flows from the Fund. The lower the discount rate the higher the resulting capital value.

Financial assumptions: Assumptions relating to future economic factors which will affect the funding position of the Fund, such as inflation and investment returns.

Funding objective: An objective to have a particular level of assets relative to the accrued liabilities of the Fund. See also statutory funding objective.

Pension Protection Fund (PPF): Provides compensation to members of an eligible occupational scheme in the event that it is wound up with insufficient assets and the employer is insolvent. The level of PPF compensation provided would not usually be at the full level of the benefits that would otherwise have been due.

Prudence: Regulations require that assumptions are chosen prudently when assessing the level of technical provisions, although they do not define this term. I have interpreted prudence to be the level of conservatism in the assumptions. Where this is interpreted quantitatively, assumptions said to be prudent would result in higher technical provisions than a "best estimate" assumption (where a "best estimate" assumption is one where there is a 50% chance that the actual outcome will be higher or lower than assumed).

The Pensions Regulator: The regulatory supervisor for occupational pension schemes with statutory objectives to protect members' benefits and the Pension Protection Fund, and statutory powers to take interventionist action.

Recovery plan: A document required where an actuarial valuation discloses that the statutory funding objective is not met (ie the assets held are less than the technical provisions). It is a formal agreement between the trustees and the employer that sets out the steps to be taken to achieve the statutory funding objective by the end of an agreed period (the "recovery period").

Schedule of contributions: A document that sets out in detail the agreed contributions payable to a scheme by members and the employers and the dates by which such contributions are to be paid. It includes, but is not limited to, contributions agreed under a recovery plan.

Scheme Actuary: The individual actuary appointed (under the Pensions Act 1995) by the trustees to perform certain statutory duties for the Fund.

Scheme-Specific Funding Regime: A term used to refer to the legislative and regulatory rules that stem from the Pension Act 2004 and which govern the funding of occupational defined benefit pension schemes in the UK.

Statement of Funding Principles (SFP): The SFP sets out the trustees' policy for ensuring that the statutory funding objective and any other funding objectives are met and, in particular, the assumptions for calculating the technical provisions at the effective date of the actuarial valuation. The trustees are responsible for preparing and maintaining this document, taking into account the advice of the Scheme Actuary and in many cases seeking the agreement of the employer.

Statement of Investment Principles (SIP): The SIP sets out the trustees' policy for investing the Fund's assets. The trustees are responsible for preparing and maintaining this document, taking into account written investment advice from the appointed investment advisor and consulting the employer before any changes are made.

Statutory estimate of solvency: An estimate of the cost of discharging a scheme's liability to pay benefits through the purchase of insurance policies in respect of each member's full benefit entitlement under the Fund (unless the actuary considers that it is not practicable to make an estimate on this basis, in which case the estimate of solvency can be prepared on a basis that the actuary considers appropriate).

Statutory funding objective: To have sufficient and appropriate assets to cover the Fund's technical provisions.

Statutory priority order: The order in which the assets of a scheme must be applied in securing the benefits of different members in the event of it being wound up. The order is consistent with the Pension Protection Fund (PPF) because benefits covered by the PPF are the highest priority class of defined benefit liabilities.

Summary funding statement: An update sent to members following the completion of each actuarial valuation or actuarial report informing them of the assessed financial position of the Fund.

Technical provisions: The amount of assets required to make provision for the accrued liabilities of the scheme. The technical provisions are calculated using the method and assumptions set out in the Statement of Funding Principles.

Winding-up: This is a particular method of discharging a scheme's liability to pay benefits. It typically arises where the employer no longer provides financial support to it (for example if it becomes insolvent) and would usually involve using the scheme's assets to buy insurance policies that pay as much of the scheme's benefits as possible in accordance with the statutory priority order.