MEETING: PENSION BOARD

DATE: **6 MARCH 2023**

TITLE: CASH FLOW MODELLING PROJECTIONS REPORT

PURPOSE: To present the Cash Flow Modelling Projections

report.

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1. INTRODUCTION

The purpose of this report is to present the Cash Flow Modelling report following the recent valuation. The report can be seen in Appendix 1.

The objective of the report was to project the expected cashflows of the Fund over a 20 year time horizon and to understand the sensitivity of the net cashflow position of the Fund to a number of inflation scenarios.

2. WHAT ARE THE CASH FLOWS OF THE FUND

The Fund's primary sources of income are:

- Contributions from employers in the Fund
- · Contributions from employee members in the Fund
- Income streams generated from the Fund's investments

The Fund's outflows are the benefits payable to the members and their dependants. These include:

- Retirement lump sums paid to active and deferred members on retirement
- Retirement pensions paid to pensioners and their dependents
 Death in service benefits and ill health benefits.

3. CURRENT POSITION

The chart below shows the absolute value of contribution income and benefit (bars) and the net cashflow position (blue line and white figures) over the last 3 years:



The cashflow position has remained positive in recent years for the Fund.

4. CASHFLOW NEGATIVE

Historically, the benefits have been paid out of the contribution income with any excess being invested. This is how the Fund's asset value has built up over time (along with investment returns). Over time a pension fund will mature and the level of benefit payments will start to exceed contribution income. At this point, a pension fund is considered "cashflow negative" and within this report, three possible scenarios were modelled to ascertain when this point is reached for Gwynedd Pension Fund.

Being cashflow negative itself is not unexpected for a pension fund. The assets that have been accrued are for the purpose of paying benefits – using them for that purpose is exactly as intended. However, if the transition to being cashflow negative is not monitored and managed effectively, it can pose a liquidity risk and the Fund may become a forced seller of assets.

5. SCENARIO ANALYSIS

The following scenario's were modelled for the fund:

Scenario 1: the baseline scenario, where inflation trends to the long-term Bank of England target of 2% p.a. by September 2025.

Scenario 2: a recession scenario, occurring largely due to excess supply over demand as a result of higher energy and food prices. This is similar to the Bank of England forecast.

Scenario 3: a stagflation scenario where inflation remains high due to higher energy and food prices.

The basic results were as follows:

Whole fund	First cashflow	Estimated net cashflow position by		
	negative by	2027	2032	2042
Baseline inflation scenario	2032	+£17m	-£2m	-£10m
Recession inflation scenario	N/A	+£21m	+£12m	+£28m
Stagflation inflation scenario	2029	+£11m	-£28m	-£123m

6. ANALYSIS OF RESULTS

The conclusion from the analysis is as follows:

- Under the baseline scenario, the Fund is likely to be cashflow negative by 2032 assuming inflation is in line with the baseline scenario, however if allowance is made for recent levels of investment income, the year at which the Fund is likely to be cashflow negative is pushed back to 2036.
- Under the recession inflation scenario- the cashflow position improves and it is projected to remain positive for the whole 20 year observation period.
- Under a stagflation inflation scenario, the Fund is likely to become cashflow negative by 2029, with a significant gap opening up over the longer term.

7. RECOMMENDATION

The Board is asked to note the report.