CLWYD PENSION FUND COMMITTEE

Date of Meeting	Wednesday,12th June 2019
Report Subject	Funding, Flightpath and Risk Management Framework Update
Report Author	Clwyd Pension Fund Manager

EXECUTIVE SUMMARY

Members should note that:

- On consistent actuarial assumptions, the estimated funding position at the end of April is 91% which is around 10% ahead of the expected position from the 2016 actuarial valuation. However, there still remains uncertainty regarding future inflation and investment return expectations, especially given the recent market volatility. The valuation assumptions are being reviewed as part of the 2019 valuation and further details are contained in a separate report on the 2019 valuation.

- The level of hedging remains at 20% for interest rate and 40% for inflation at 30 April 2019.

- No triggers have been breached since the interest rate triggers were re-structured in September 2017. Mercer recommended no change to the interest rate trigger levels as part of the flightpath healthcheck.

- The dynamic equity protection strategy was implemented on 24 May 2018. As at 30 April 2019, the strategy had made a gain of £13m or 3.5% since inception of the strategy. The Fund is protected from falls in equity markets of 21% or more from current levels. More detail is provided separately in the Mercer report in Appendix 1.

- The Officers, with the advice of and the combined teams at Mercer decided to implement a collateral waterfall structure to increase the efficiency of the collateral position within the Insight QIAIF in a low governance manner, but without impacting the overall risk management profile of the flightpath strategy. The collateral waterfall is now fully in place and introduces two new funds at Insight; the Global ABS Fund (c. £44m confirmed investment) and the Secured Finance II fund (c. £50m confirmed investment). It has also been decided that c. £30m will be released from the Insight QIAIF to be invested in infrastructure in due course.

- A currency hedging solution has been implemented on 8 March 2019 to protect the Fund against a strengthening pound which would have a

	detrimental impact on the Fund's deficit as overseas assets would be worth less. The Officers agreed that hedging the currency risk of the market value of the synthetic equity portfolio would provide the Fund with broadly the 50% strategic hedge ratio that we would recommend. The total market value at inception on 8 March 2019 was -£13.7m, which has risen to +£13m at 30 April 2019. Between inception and 30 April 2019 the currency hedging has detracted £0.1m from the gain in the synthetic equity portfolio, however we expect volatility from currency movements to be reduced going forwards which was the key reason for implementing the strategy.

RECOMMENDATIONS	
1	That the Committee note the updated funding position (on assumptions consistent with the 2016 valuation) and hedging position for the Fund and the progress being made on the various elements of the Risk Management Framework.
2	That the Committee note that Insight have implemented the collateral waterfall process previously agreed with the Officers and their advisors. It has also been agreed that c. £30m will be removed from the Insight QIAIF to be invested in infrastructure as directed in due course.
3	That the Committee note that any currency risk associated with the market value of the synthetic equity portfolio with the Flightpath strategy has now been hedged.

REPORT DETAILS

1.00	**FUNDING, FLIGHTPATH AND RISK MANAGEMENT STRUCTURE UPDATE**
1.01	***Update on funding and the flightpath framework*** The monthly summary report as at 30 April 2019 from Mercer on the funding position and an overview of the liability hedging mandate is attached in Appendix 1. It includes a "traffic light" of the key components of the Flightpath and hedging mandate with Insight. The report will be presented at the meeting including a reminder of the principle objectives of the framework.
1.02	The estimated funding level is 91% with a deficit of £191m at 30 April 2019 which is 10% ahead of the expected position when measured relative to the 2016 valuation expected funding plan Uncertainty continues to be prevalent in the investment environment due to ongoing external political and fiscal factors. To illustrate the impact, a reduction of 0.25% p.a. in the assumed future investment return/real discount rate would reduce the funding level by c. 4% to c. 87% with a corresponding increase in deficit of £90m to £281m. For the purposes of this report the funding position has been measured on consistent actuarial assumptions with the 2016 valuation. The actuarial assumptions are being reviewed as part of the 2019 valuation and the initial estimated results are set out in the separate report.

1.03	None of the interest rate triggers have been satisfied since they were re-structured in September 2017.
1.04	The level of hedging was around 20% for interest rates and 40% for inflation at 30 April 2019. The hedging implemented to date provides access to a lower risk investment strategy but maintaining a sufficiently high real yield expectation to achieve the funding targets.
1.05	Based on data from Insight, our analysis shows that the management of the Insight mandate is rated as “green” meaning it is operating in line within the tolerances set by our strategic risk advisors. The LIBOR Plus Fund is rated “amber” due to the temporary limit on future investments into the fund. This should not affect the operation of the mandate but it will be kept under watch. Going forwards this section will be reclassified as the Cash Plus Fund section to monitor the three funds that sit within the collateral waterfall framework: LIBOR Plus fund, Global ABS fund and the Secured Finance II fund. The collateral and counterparty position is rated “green”; collateral is within the agreed constraints and the Officers have taken action with their advisors to improve the efficiency of the collateral position (see section 1.07).
1.06	***Update on Risk Management framework*** (i) Dynamic equity protection implementation and progress It was previously approved by Committee that, subject to fair market pricing, protection against potential falls in the equity markets via the use of Equity Options should be implemented. This was to provide further stability (or even a reduction) in employer deficit contributions (all other things equal) in the event of a significant equity market fall although it is recognised it will not protect the Fund in totality. It should be noted that, having an equity protection policy in place will protect from any large changes in equity markets which is currently prevalent given the significant rally of equity returns that we have seen over Q1 2019 following the sharp downturn seen in Q4 2018. Importantly over the longer-term the increased security allows the Actuary to include less prudence in the Actuarial Valuation assumptions; this would translate into lower deficit contributions at the 2019 valuation whilst maintaining equity exposure supports a lower cost of accrual than under traditional de-risking methods. As at 30 April 2019, the dynamic protection strategy had increased by c. £13m or 3.5% since inception of the strategy. Relative to investing in passive equities (and assuming no costs to do so), the strategy has underperformed by c. £10.7m or 3.6% since inception. It should be noted that the strategy did outperform passive equities by providing protection during the December equity market downturn; the subsequent equity market rally since the turn of the year, however, has meant that this protection is now less valuable and hence the underperformance. The strategy provides protection from equity market falls of 21% or more. If

	such a downside event occurred, then the protection structure should outperform passive equities. The protection will be monitored on an ongoing basis and the Committee papers have been updated as part of the reporting in Appendix 1.
1.07	(ii) Collateral position Due to the positive performance of the flightpath framework since its implementation, Mercer indicated that there was an opportunity to increase the efficiency of the collateral in the QIAIF by implementing a collateral waterfall process at Insight. The Officers, with the advice of the combined team at Mercer, completed implementation of this structure in Q1 2019. The waterfall introduces two new funds, namely the Global ABS Fund (confirmed £44m investment) and the Secured Finance II fund (confirmed £50m investment). Mercer calculated, and Insight have confirmed, the minimum level of collateral required whilst still supporting the current positions and maintaining the flightpath strategy to be £170m. This would still leave sufficient collateral in the event of market moves or in the event of any triggers being hit in line with the agreed guidelines. The waterfall at outset can be summarised as follows: • Tier 1: c. £215m in cash and gilts to support collateral requirements on a day to day basis • Tier 2: c. £100m of additional collateral that acts as a buffer invested high quality liquid funds (Global ABS fund and Libor Plus fund) • Tier 3: £50m of excess collateral that is invested in high quality but illiquid assets (Secured Finance II fund) Approximately £30m will be released from the QIAIF to be invested in infrastructure assets as directed in due course. The waterfall requires that Insight hold at least £170m in Tier 1 assets at any time and if the value falls below that amount, they have discretion to sell assets from Tier 2 to top this up. Tier 2 funds are daily traded and can act as a ready source of collateral as required whilst generating a higher expected yield in the meantime. The value of the Tier 1 assets as at 31 March 2019 is £262.2m. The Fund could withstand a combined 1.9% fall in inflation expectations and a 20% fall in the equity markets, or a 3% rise in interest rates and a 20% fall in equity markets before all collateral is extinguished. This approach is expected to generate an additional yield of £3m p.a. versus the previous structure whilst still providing adequate security that the collateral position is managed effectively. A collateral waterfall ensures that the Insight QIAIF provides the necessary collateral requirements but makes those assets work harder, increasing yield in a low governance manner. (iii) Implementation of currency hedging Currency risk is a major risk to the Fund and a strengthening pound would have a detrimental impact on the Fund's deficit as overseas assets would

	be worth less in sterling terms. Analysis shows that a 50% currency hedge ratio has historically led to the maximum reduction in volatility for sterling investors. The equity exposure is broadly split 50/50 between physical equities and the synthetic equity portfolio managed by Insight (with JP Morgan as counterparty). The nature of the synthetic equity portfolio means there are no physical underlying assets, therefore there is no currency risk on the notional exposure. However, the market value of the synthetic equity portfolio, which is c. 75% USD denominated and c. 25% EUR denominated, is exposed to currency risk as the excess returns need to be converted back to sterling. The Officers agreed that hedging the currency risk of the market value of the synthetic equity portfolio would provide the Fund with broadly the 50% strategic hedge ratio that we would recommend. This was implemented on 8 March 2019 in a practical and cost efficient manner, with the Fund paying slightly more in transaction costs (JP Morgan has estimated on average 3bps p.a. on the notional exposure), however there are no additional costs for implementation or management fees. Given the market value of the synthetic equity portfolio is relatively small at the moment, the currency hedge as only had a small impact to date. However, as the market value increases, the Fund is at greater risk of adverse currency movements negatively impacting the market value and this approach future-proofs the synthetic equity portfolio from a risk perspective. Between inception on 8 March 2019 and 30 April 2019 the currency hedging has detracted £0.1m from the gain in the synthetic equity portfolio, however we expect volatility from currency movements to be reduced going forwards which was the key reason for implementing the strategy.

2.00	RESOURCE IMPLICATIONS
2.01	None directly as a result of this report

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	None required

4.00	RISK MANAGEMENT
4.01	This report addresses some of the risks identified in the Fund's Risk Register. Specifically, this covers the following (either in whole or in part): • Governance risk: G2 • Funding and Investment risks: F1 - F6
4.02	The Flightpath Strategy manages/controls the interest rate and inflation rate impact on the liabilities of the Fund to give more stability of funding outcomes and employer contribution rates. The Equity option strategy will

	provide protection against market falls for the synthetic equity exposure via the Insight mandate only. The collateral waterfall framework is intended to increase the efficiency of the Fund's collateral, and generating additional yield in a low governance manner. Hedging the currency risk of the market value of the synthetic equity portfolio will protect the Fund against a strengthening pound which would be detrimental to the Fund's deficit.

5.00	**APPENDICES**
5.01	Appendix 1 - Monthly monitoring report – April 2019

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**
6.01	Report to Pension Fund Committee – Flightpath Strategy Proposals – 8 November 2016, Report to Pension Fund Committee – 2016 Actuarial Valuation and Funding/Flightpath Update – 27 September 2016 and Report to Pension Fund Committee – Funding and Flightpath Update – 22 March 2016.
6.02	Report to Pension Fund Committee – Overview of risk management framework – Previous monthly reports and more detailed quarterly overview. **Contact Officer:** Philip Latham, Clwyd Pension Fund Manager **Telephone:** 01352 702264 **E-mail:** philip.latham@flintshire.gov.uk

7.00	**GLOSSARY OF TERMS**
7.01	(a) **The Fund – Clwyd Pension Fund** – The Pension Fund managed by Flintshire County Council for local authority employees in the region and employees of other employers with links to local government in the region. (b) **Administering Authority or Scheme Manager** – Flintshire County Council is the administering authority and scheme manager for the Clwyd Pension Fund, which means it is responsible for the management and stewardship of the Fund. (c) **The Committee – Clwyd Pension Fund Committee -** the Flintshire County Council committee responsible for the majority of decisions relating to the management of the Clwyd Pension Fund. (d) **LGPS – Local Government Pension Scheme** – the national scheme, which Clwyd Pension Fund is part of (e) **FSS – Funding Strategy Statement** – the main document that outlines how we will manage employers contributions to the Fund (f) **Actuary -** A professional advisor, specialising in financial risk, who is appointed by Pension Funds to provide advice on financial related

	matters. In the LGPS, one of the Actuary's primary responsibilities is the setting of contribution rates payable by all participating employers as part of the actuarial valuation exercise. (g) **ISS – Investment Strategy Statement** The main document that outlines our strategy in relation to the investment of assets in the Clwyd Pension Fund Further terms are defined in the Glossary in the report in Appendix 1