Economic Factors Impacting the Liability

A number of economic factors are beyond the control of MSD. In particular the unemployment, inflation and discount rates are beyond the scope of MSD's management activities.

- **Inflation:** Benefits increase in line with the CPI. Therefore, an increase in the CPI would lead to higher future (outward) cash flows.
- **Unemployment:** Highly indicative of the state of the economy, the unemployment rate impacts many benefit types, not just the Jobseeker Benefit (e.g. AS). A material increase in the unemployment rate would have an adverse effect on liability.
- **The Discount Rate:** The time value of money. In other words – in today's money – how much money would we need to put aside now to pay that liability, assuming that amount would earn interest.

How does the Discount Rate work?

- The Discount Rate is a proxy for the value of money over time. Say we wanted $10 in two years' time and the current interest rate was 10% - we'd need to set aside $8 now. If the interest rate was 5% - we'd need to set aside $9.

  In essence this means when interest rates fall – the liability goes up.

  This can be thought of as the amount needed to be set aside today to pay for all payments attributable to the current cohort of clients, assuming that amount would earn interest according to Treasury's discount rate schedule.

What's the Treasury Discount Rate Schedule?

- The Valuation uses Treasury forecasts for Consumer Price Index (CPI) inflation and Government interest rates for inflation and discounting of the benefit system liability.

What is the Inflated and Discounted liability?

- The inflated and discounted estimate of the current client liability is **$76.0 billion**.
- By inflated and discounted we mean that this is the sum of the projected future payments, including CPI increases to benefit rates, and discounted at Treasury rates to allow for the time value of money.
- It is important to estimate liabilities allowing for both future inflation and the time value of money so that investment decisions can be made on a like-for-like basis.

What is meant by Real Interest Rates?

- The Real Interest Rate is the difference between discount rates and inflation. It is critical to the inflated and discounted liability. If the gap between these rates decreases, or even becomes negative (so that inflation rates exceed the discount rates), then this would lead to a higher inflated and discounted liability.

So the Total Liability has gone up billions due to economic impacts you can't control?

- That's right, but we also can strip that factor out of the figures and see what impact MSD's initiatives have had on the liability. Once factors outside of MSD's management control are removed, the liability decreased by $1.7 billion.

Why use the Discount Rate at all if you have to strip it out to find out anything useful?

- It is useful, it just depends what you're seeking to understand.
- If you want to understand how effective we've been at managing the benefit system – stripping it out makes sense so we can measure year-on-year change.
- If you want to understand which groups of people (proportionately) have a higher tendency towards long term benefit dependency within each valuation, it also helps to strip out the effect of changing discount rates
- If you want to understand the cost of the benefit system it is important to incorporate the discount rate as otherwise you don't have an accurate view of the real cost of the current beneficiary population, meaning investment decisions can be made on a like-for-like basis.
- Ultimately it's horses for courses. It is wiser to incorporate more data that can be subsequently stripped out for particular purposes.

Changes in estimates of liability from the previous estimate

- From one valuation to the next it is possible to measure changes to the estimated liability arising from things such as forecast inflation, discount rates and unemployment rates.
- The total increase in liability is $7.6 billion from 30 June 2015.
- A large factor in the change is the future CPI forecast (most benefits increase with CPI), causing a $2.6 billion decrease in the liability.
- A slightly higher than previously forecast unemployment rates and lower than previously forecast discount rates has resulted in an increase of $9.7 billion.
- There was a $0.7bn decrease in liability expected because the falling rate of unemployment had been expected to result in more people exiting benefits and less people applying for a benefit.
- Once factors outside of MSD's management control are removed, the liability decreased by $1.7 billion. Some of this relates to lower than expected numbers of beneficiaries on the valuation date and some to improvement in future forecasts.