

# Discovery Limited Investor Communication

EXPLANATION OF CHANGES TO DISCOVERY LIMITED'S ECONOMIC BASIS AT JUNE 2018



## 1. Introduction

The economic bases of the life insurance businesses for IFRS and Embedded Value reporting purposes within Discovery have been reviewed.

The move to SAM as the regulatory basis in South Africa from 1 July 2018 provided the trigger for the review of the Discovery Life and Invest economic bases.

Short term gilt yield volatility and negative real yields in the UK have triggered a review of the reliability of using volatile point in time market observations to set long-term future investment return assumptions.



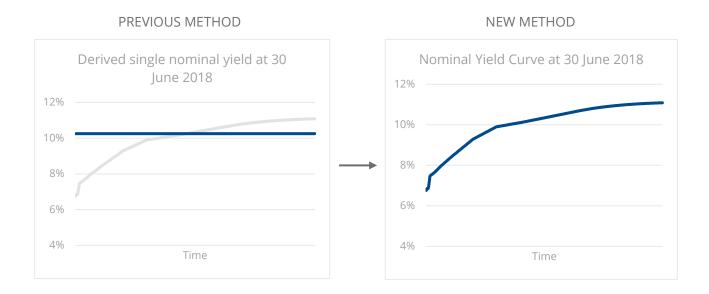
## 2. Discovery Life and Invest-South Africa

#### **Nominal Interest Rate Assumption**

Previously Discovery Life derived a cash flow weighted implied single interest rate from the risk-free yield curve for reserving purposes. The single rate was derived to ensure that the Discovery Life prospective reserve at the valuation date when calculated using the single rate is equal to the reserve calculated using the yield curve.

A change was made to the Discovery Life economic basis to align the nominal interest rate assumption with the **shape** of the nominal curve. Although this change does not impact on the implied weighted average nominal interest assumption, it does impact on the expected unwind of the reserve in future time periods and ensures a closer alignment to the runoff pattern implied by the yield curve. The current upward slope of the yield curve implies a lower unwind rate during the early projection years, ignoring the expected unwind of the durational risk premium.

The methodology was extended to the Risk Discount Rate used to calculate the Value of In-force (ViF) and hence the unwind of the ViF will similarly be impacted.

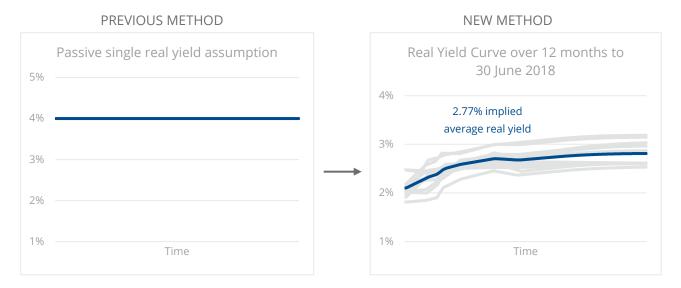




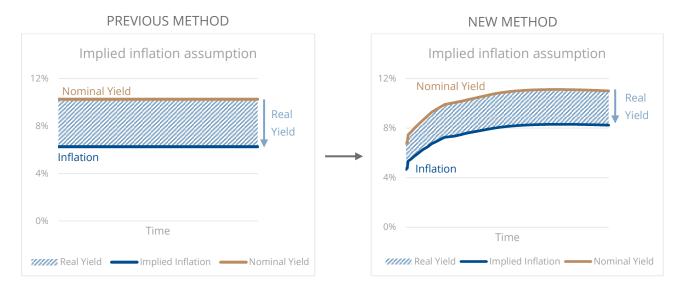
#### **Real Interest Rate Assumption**

The real interest rate assumption was also reviewed and moved from a single point estimate to using the real yield curve. Using a real yield curve rather than a single point estimate ensures a runoff pattern over time consistent with that implied in the real curve.

The real yield curve can be volatile over time given the relatively small market size of CPI-linked bonds. In order to improve the reliability of the reserve estimates, the average of the real yield curves observed over the 12 month period prior to 30 June 2018 was used to set the real yield curve assumption at 30 June 2018. We understand that it is consistent with market practice of limiting the volatility of the real yield assumption to improve the reliability of the IFRS estimates.



One important implication of the real yield is the derivation of inflation:



The real interest rate assumption will be reviewed annually and if the average observed real yield (as measured by the implied single rate) changes by more than 25bps, consideration will be given to change the real yield assumption. The impact of the change is a reduction in the real yield from a single rate of 4% used before to an implied single rate of c2.77% at 30 June 2018.

The methodology was consistently extended to Discovery Invest and Discovery Health.

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### 3. VitalityLife – United Kingdom

One of the key economic assumptions for VitalityLife is the investment (and reinvestment) return assumption relating to the expected return on cash flows which will be invested in many years into the future. Historically VitalityLife used the observed gilt yield curve at a single point in time to set the investment return assumption. The recent interest rate volatility combined with negative implied real yields in the UK triggered a review of the economic assumptions.

## UK Forward Nominal Gilt Yield Volatility % change in 10-day rolling difference



VitalityLife currently has negative liabilities and is only expected to build up material positive liabilities many years into the future. A long term view of the investment return assumption is therefore material to the reliability of the IFRS estimates of VitalityLife. It further does not make sense for a material future long-term assumption to change on a frequent basis.

The VitalityLife interest rate assumption (for IFRS purposes) has been reviewed and set in-line with the risk-adjusted yield expected from a basket of fixed interest securities (government bonds and investment grade corporate bonds) based on the risk-adjusted yield observed on average over the 12 months prior to 30 June 2018. The risk-adjusted yield aims to exclude credit risk but includes an allowance for the estimated liquidity premium observed on corporate bonds.

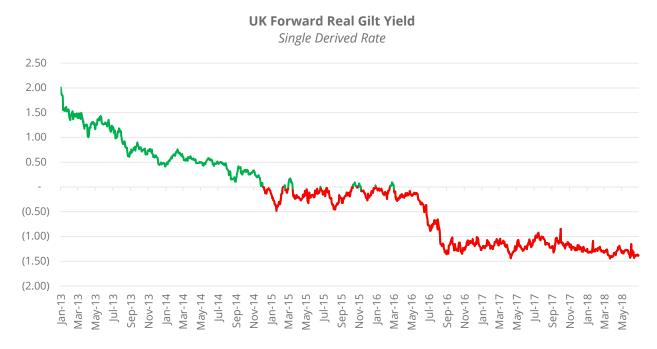
The investment return assumption will be reviewed annually and if the average observed risk-adjusted yield changes by more than 25bps, consideration will be given to change the investment rate assumption.

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The impact of the change is an increase in the investment return assumption from 2.13% p.a. at 30 June 2017 to 2.5% p.a. at 30 June 2018.

The real interest rate assumption was simultaneously reviewed. The observed real yield curve has moved into negative territory during 2015.



Given the negative implied real yields currently observed in the UK, the real yield was set considering recently observed RPI inflation as well as expected future long term inflation. The real yield assumption was set as -0.5% p.a. during the first five projection years but reverting back to 0% p.a. at the end of year five. The real interest rate assumption will be reviewed annually and updated should the view of expected future real yields or inflation change materially.

Given the materiality of the long-term future re-investment rate for VitalityLife, changes have been made to the VitalityLife investment return assumption. This change together with the change to the VitalityLife real yield assumptions should result in greater reliability and stability of IFRS estimates for VitalityLife and have been externally reviewed to ensure consistency with market practice and relevant actuarial guidance.