Discovery Life and Invest Investor Communication

RESILIENCE OF ASSETS UNDER INSURANCE CONTRACTS AND NEGATIVE RAND RESERVES IN DISCOVERY LIFE AS AT 30 JUNE 2017

0. Introduction

This note is intended to discuss various aspects of Discovery Life and Invest's results presented in Discovery Limited's Annual Financial Statements for the benefit of investors' understanding of Discovery Life's Negative Rand Reserve (NRR). In particular, the discounted cash flows recognised in the published IFRS accounts are explained in greater detail in section 2, while the risks associated with the emergence of these cash flows are explored in section 3. The results reflect the fact that Discovery Life[1] has adopted prudent IFRS reserving assumptions and the risk of the emerging cash flows being lower than the recognised value of the NRR is shown to be extremely remote.

This note is based on a 30 June 2017 reporting date (unless otherwise indicated), is targeted at knowledgeable investors and investment analysts and assumes previous knowledge of Discovery Annual Financial Statements. It is further intended to provide supplementary information on a principles basis rather than intended to provide any specific reconciliations to the accounts.

1. Executive Summary

Discovery Life is unique in that its young age relative to competitors combined with significant compounded annual growth of profitable whole-of-life new business has resulted in the recognition of a large negative rand reserve (NRR) in its published IFRS accounts. Discovery Life follows a prudent accounting policy which defers the emergence of profit through the addition of prescribed compulsory and discretionary margins to the best estimate assumptions in line with the Discovery Group Accounting Policy.

These margins are shown to provide a significant buffer should actual experience not emerge as expected, with the recognised NRR at 30 June 2017 remaining fully recoverable on an **economic basis** with in excess of a 99.5% probability under a range of remote stresses discussed in section 3 in the body of the report. It should be noted that while these stresses may still result in a strain on the Income Statement in the year the stress occurs, the NRR remains economically fully recoverable, as emerging cash flow, over time.

[1] Any further reference to Discovery Life in this document also includes Discovery Invest.

2. Discovery Life's published IFRS reserves

Discovery Life's published IFRS Negative Rand Reserve (NRR) represents the present value of expected future profits (i.e. a prospective assessment of the expected excess of income over outgo over the lifetime of the policy) which have been recognised in the Annual Financial Statements.

It should be noted that the recognition of profits is in accordance with Discovery's Accounting Policy with the recognition of profits being deferred through the use of conservative reserving assumptions; in particular through the addition of compulsory margins as prescribed in SAP104 with additional discretionary margins being added to the reserving basis to avoid the premature recognition of expected future profits.

Table 1 illustrates the present value of future cash flows not committed for other obligations expected to emerge which have been recognised in the Annual Financial Statements (AFS).

Table 1: Present Value (PV) of future cash flows recognised in the AFS which are not committed for other obligations

	Individual Life	Invest	Total
Assets Under Insurance Contracts	**-24 008**		**-24 008**
Long term reserves (policies with negative liabilities)	-27 650		-27 650
Long term reserves (policies with positive liabilities)	3 642		3 642
Other Negative Liabilities		**-3 428**	**-3 428**
Long term reserves (policies with negative liabilities)		-3 683	-3 683
Long term reserves (policies with positive liabilities)		255	255
Liabilities offset against Negative reserve before zeroisation[2]	**6 839**		**6 839**
Total Long term reserves	**-17 169**	**-3 428**	**-20 597**
PV of future cash flows not committed for other obligations which are capitalised in the IFRS reserve and are expected to emerge[3]	**17 169**	**3 428**	**20 597**

After allowing for commitments, in particular commitments under the cashless financing structure and cash financing treaties, Discovery Life has recognised and therefore expects R17.169bn of cash flow on a present value basis to emerge from Individual Life business and R3.428bn to emerge from Investment business.

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[2] As discussed in a previous Investor Communication Document "Understanding Discovery Life and Invest's projected in-force book cash flow profile," a significant portion of the early duration free cash flows are earmarked for repayments of cash financing treaties written as well as to build-up the tangible asset backing of the guaranteed investment products through the "cashless-financing structure" discussed in that report. These two items constitute the majority of the R6 839m offset included in this line.

[3] Discovery Life's large Negative Rand Reserve is expected to emerge as positive cash flow in the future. The cash flows relating to the "cashless-financing structure" as well as repayments of cash financing treaties discussed above are considered to be "committed for other obligations" and are consequently excluded when considering the PV of cash flows expected to emerge.

As noted above, Discovery Life applies compulsory and discretionary margins in the calculation of the IFRS NRR for prudence and to defer the emergence of profit. In addition to the present value of future cash flows capitalised in the IFRS reserve and not committed for other obligations, the compulsory and discretionary margins are expected to emerge as cash flow as actual future experience develops in line with our best estimate of future experience (excluding margins).

Consequently, the total present value of future cash flows expected to emerge on Discovery Life's in-force book is the sum of the cash flows recognised in the AFS not committed for other obligations together with the expected future emergence of the prudent reserving margins, as shown in table 2 i.e. the present value of margin releases is not reflected in the NRR on an IFRS basis.

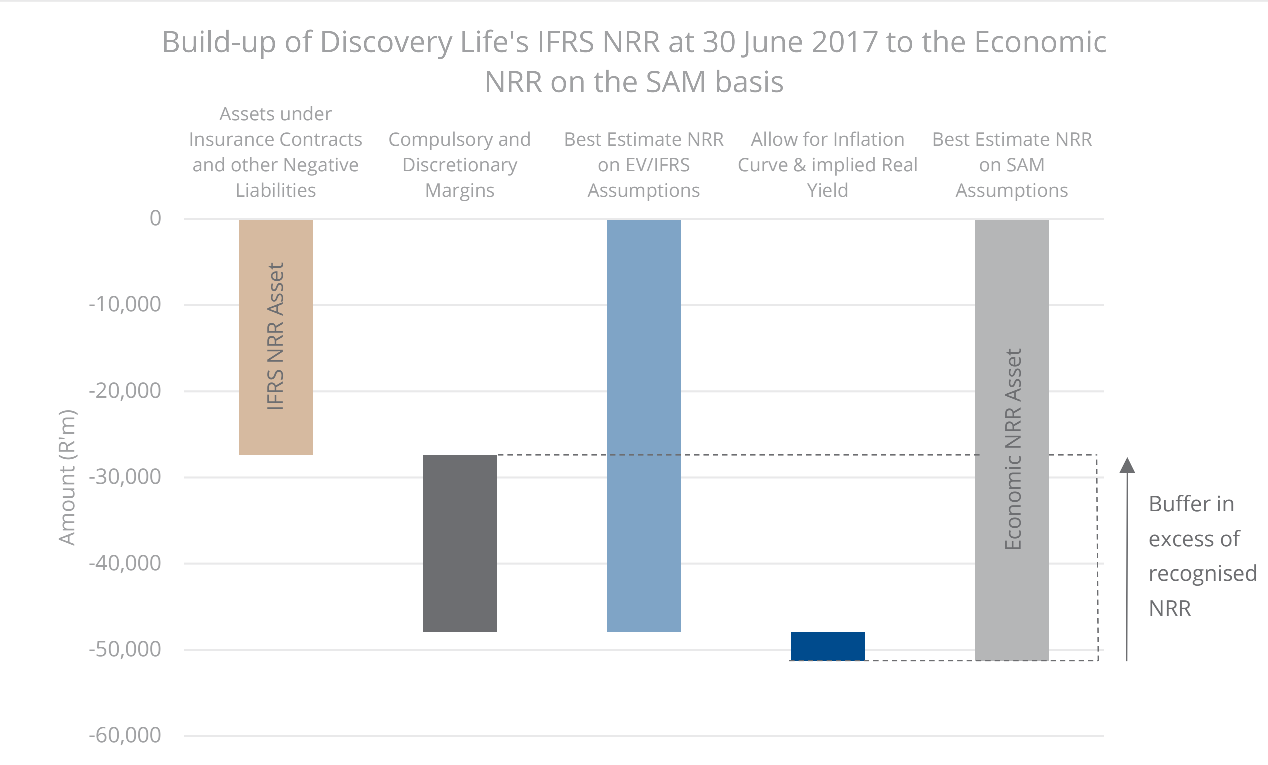
Table 2: Present Value (PV) of future cash flow emergence on Discovery Life's in-force book (amounts in R'm)

	Total
PV of future cash flows capitalised in the IFRS reserve not committed for other obligations (from table 1)	20 597
PV of releases of Margins	20 243
PV of future cash flow emergence not committed for other obligations	**40 840**

The results presented in table 1 and 2 are calculated on assumptions consistent with those used in the calculation of the Embedded Value as at 30 June 2017 (these assumptions are outlined in the Embedded Value Statement in the AFS). In particular, at that time, a single flat nominal interest rate was derived with an assumed single rate of CPI being assumed. This approach results in a high discount rate relative to the inflation assumption. Moving to a term-structure of interest rates and an implied inflation curve (as required under the Solvency Assessment and Management (SAM) regulatory capital calculations) results in a lower real yield curve than that used to produce the results presented in table 2. The impact of this change is shown in graph 1 below.

At the 30 June 2018 reporting date, Discovery Life has revised the economic assumptions used in the calculation of the Embedded Value and IFRS reporting. For a detailed description of this change, the reader is referred to the separate document discussing the economic basis change for Discovery Life at 30 June 2018.

Graph 1: Build-up of the IFRS NRR on Discovery Life Business to a SAM best estimate basis allowing for the release of margins as well as the use of an inflation curve instead of the single CPI rate assumed in IFRS modelling (i.e. the impact of using current market indicators for inflation instead of the IFRS assumption as at 30 June 2017)



From the graph, the following points are noted for the Individual Life business:

- The difference between the IFRS asset (i.e. the IFRS NRR) and the economic asset (i.e. the best–estimate NRR on a SAM basis) is the compulsory and discretionary margins as well as the allowance for the inflation curve. **In total, only c53.5% of the economic asset has been realised on an IFRS basis at June 2017.**
- The resulting buffer against deviations in assumptions is significant; cR20.2bn assuming the single CPI rate (consistent with the IFRS Best estimate assumptions) or cR23.6bn assuming the inflation curve consistent with the SAM best estimate modelling. **The NRR is therefore robust, with the asset remaining fully recoverable on an economic basis even under significant losses of future cash flow.**
- Sensitivities are considered in section 3 which demonstrate the economic resilience of the NRR under remote stresses.

Table 3 shows the timing of the present value of cash flows on the Discovery Individual Life business on a conservative IFRS basis allowing for compulsory and discretionary margins as well as on best estimate assumptions (i.e. no compulsory or discretionary margins) first using the IFRS/EV single CPI rate assumption and then on the SAM market consistent inflation curve. **The NRR is recovered after c16 years on best estimate assumptions on the single CPI rate and after c14 years on best estimate assumptions assuming the inflation curve.**

Table 3: Timing of the Present Value of the reserving cash flows on the Discovery Individual Life business on conservative IFRS assumptions allowing for margins as well as on best estimate assumptions (note that a negative value reflects a net inflow with amounts in R'm)

Margins	Inflation Assumption		Year 1	Year 2-5	Year 6-10	Year 11-20	Year 21+	**Total**
IFRS Compulsory and Discretionary Margins	EV/IFRS Economic assumption	Assets under Insurance Contracts	2 408	6 821	5 114	4 869	4 796	**24 008**
		Other Negative Liabilities	326	1 207	937	915	43	**3 428**
		Assets under Insurance Contracts and Other Negative Liabilities	2 734	8 028	6 051	5 784	4 839	**27 436**
		Cash FinRe	-232	-704	-470	-188	0	**-1 594**
Best Estimate (i.e. No Margins)	EV/IFRS Economic assumption	Assets under Insurance Contracts and Other Negative Liabilities	3 238	10 529	9 348	11 114	13 674	**47 903**
		Cash FinRe	-266	-858	-560	-134	0	**-1 818**
Best Estimate (i.e. No Margins)	SAM Economic assumption	Assets under Insurance Contracts and Other Negative Liabilities	3 283	10 812	9 777	11 698	15 742	**51 312**
		Cash FinRe	-256	-857	-588	-141	0	**-1 842**

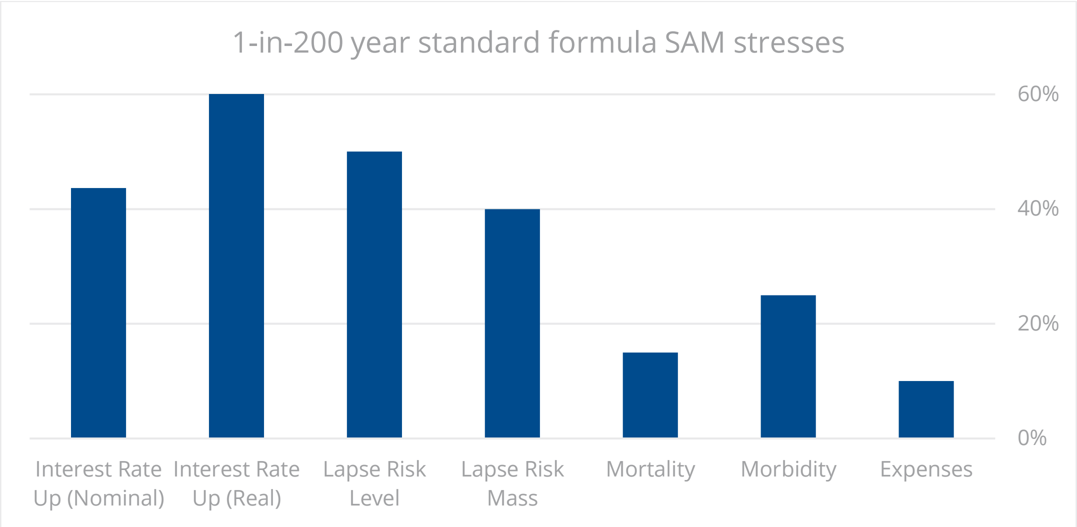
3. Resilience of the future cash flow projection

As discussed in section 2, Discovery Life's published IFRS NRR recognises a portion of cash flows which are expected to emerge in the future. Again, **the recognition of profits is in accordance with Discovery's Accounting Policy and is deferred through the use of compulsory and discretionary margins which result in a significant buffer against deviations in assumptions.** Given the size of this buffer, the NRR asset is resilient and will remain fully recoverable on an economic basis (but with the cash flow potentially emerging over a different time-frame) even under significant losses of future expected cash flow. In the section below, an indication of the level of this resilience is quantified by considering the recoverability of the NRR under a range of stresses.

The embedded value sensitivities disclosed in the AFS illustrate that Discovery Life's Value of In-Force (VIF) and Value of New Business (VNB) (which represent the future emergence of margins discounted at the risk discount rate) are robust under the wide range of stresses tested.

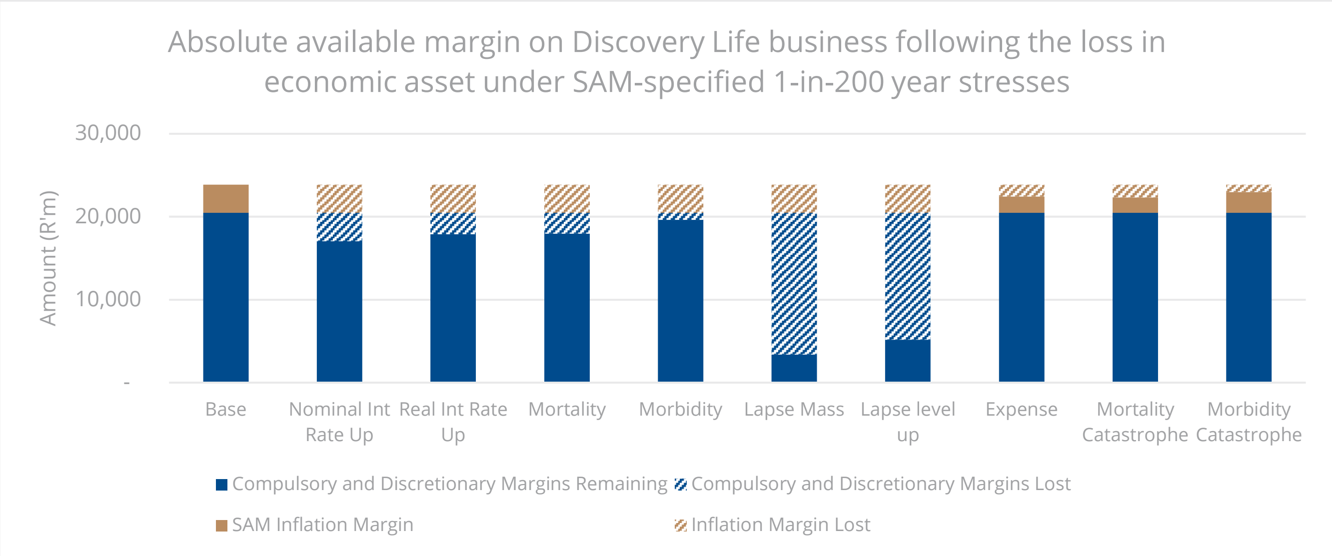
To assess the question of the resilience of the NRR, we therefore need to consider the impact of extremely remote stresses on the value of the economic asset. For the purposes of this investigation, the SAM standard formula 1-in-200 year stresses were tested for illustrative purposes. These stresses have been calibrated to a 99.5% level of confidence i.e. the probability of the stress occurring is calibrated to be 0.5%. Graph 2 depicts the level of each of the main stresses (relative to the base assumption) on the Discovery Life book (note that all stresses are applied separately and represent a permanent change in the level of the base assumption with the exception of the instantaneous mass lapse stress, while an average nominal and real interest rate stress is reflected).

Graph 2: Level of 1-in-200 year standard formula SAM stresses relative to base assumptions



These stresses were applied to the economic asset discussed in section 2 (i.e. the NRR on best-estimate assumptions valued using the inflation curve). Graph 3 shows, for each stress, the loss in the economic asset compared to the base level of margins available. To the extent that the loss in the economic asset is less than both the compulsory and discretionary margin as well as the SAM inflation margin, the NRR remains fully recoverable on an economic basis under that stress however there may be a reserving strain to the extent that the stress cannot be offset by the remaining discretionary margin balance.

Graph 3: Comparison of the margin remaining following the loss in economic asset under the 9 most significant individual 1-in-200 year SAM stresses on Discovery Life business



Even under the most severe individual stresses tested i.e. under the 40% mass lapse stress and under the 50% level lapse up stress, the loss in economic asset is not sufficient to breach the available base level of compulsory and discretionary margins available. Under all stresses tested, the IFRS NRR is recoverable with in excess of a 99.5% probability; the NRR is therefore highly resilient and the risk that the NRR is not recoverable on an economic basis is therefore considered to be extremely remote.

It should be noted that any of the above scenarios considered **may still result in a strain on the Income Statement in the year the stress occurs in spite of the fact that the NRR remains economically fully recoverable over time**. For example, consider the impact of a stress which reduces the value of future cash flows on both an economic and IFRS basis (see graph 4 below). The change in the IFRS NRR (1) is a reserving strain which may reduce earnings in the year. Even though we have also suffered an economic loss (2) under this stress, the value of future profits capitalised in the IFRS accounts will materialise (3).

Graph 4: Comparison of an economic loss and the reserving strain under an example stress.