



Discovery Life and Invest Investor Relations Communication

UNDERSTANDING DISCOVERY LIFE AND INVEST'S PROJECTED IN-FORCE
BOOK CASH FLOW PROFILE

1. 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 the development of Discovery Life and Invest's cash flows. In particular, the profile of the value (VIF) emergence is discussed in section 2 with particular emphasis being placed on explaining drivers of the observed profile. Following in section 3 is an explanation of the reasons for management's confidence in the profile of Discovery Life and Invest's value (VIF) emergence, while section 4 discusses Discovery Life and Invest's cash generation.

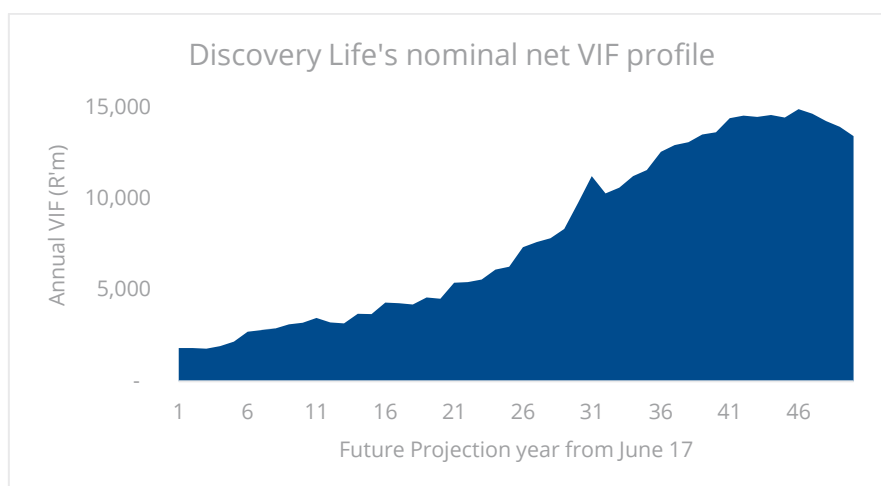
This note is targeted at knowledgeable investors and investment analysts and assumes previous knowledge of Discovery's Annual Financial Statements. It is further intended to provide supplementary information on a principles basis rather than intended to provide any specific reconciliations to the accounts. It has not been externally reviewed or audited. Any further reference to Discovery Life in this document includes Discovery Invest.

2. Discovery Life's projected cash-flow profile

The projected VIF profile of Discovery Life's in-force business is **increasing in nominal terms**, as evidenced in graph 1 below. However, the projected profile is **decreasing** when we consider the **discounted VIF profile** shown in graph 2. Overall, the increasing profile of nominal VIF is primarily driven by two main causes:

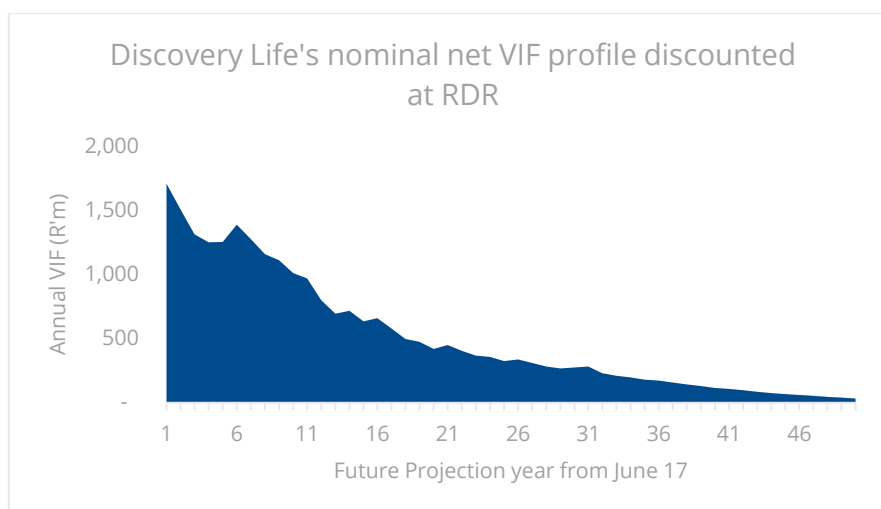
- i. **Financing Reinsurance:** Cash flows at the short end of the curve earmarked for internal reinvestment under the "Cashless Financing Structure" (defined below) as well as Financing Reinsurance repayments which reduce short-term free cash flows.
- ii. **Premium Increases:** Policies with automatic premium and benefit increases (in particular policies with benefits linked to CPI) result in significant future value emergence at future durations in nominal terms.

Graph 1: Nominal net profile of emergence of VIF¹ (after financing reinsurance and tax) of Discovery Life's in-force book at June 2017



Graph 2: Nominal net profile of emergence of VIF (after financing reinsurance and tax) of Discovery Life's in-force book discounted to June 2017 at the Risk Discount Rate (RDR)

¹ The emergence of VIF is allowed for on a cash flow basis (with negative reserves zerosied), including cash flow deferral via margins in the positive reserves.



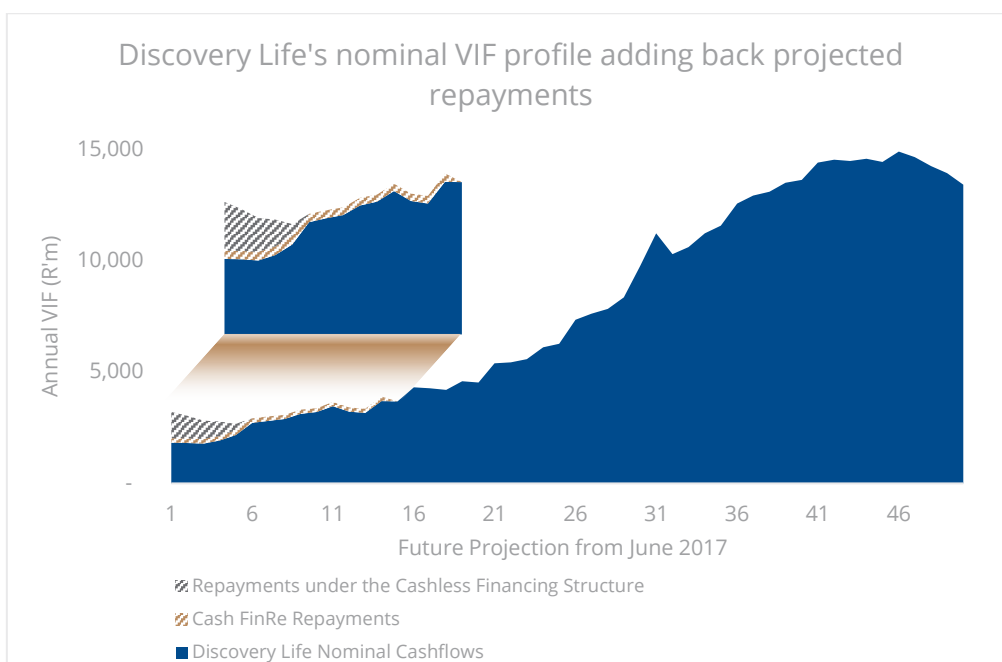
i. “Cashless financing structure” and Financing Reinsurance Impact

Definition of the “Cashless Financing Structure”: Reserves on new guaranteed investment products are matched by a portion of the Risk existing business negative reserve at inception, making inward cash flow available to finance new business strain. As the negative reserve unwinds, cash flows emerging from the existing Risk business are invested in a bond portfolio ensuring the guaranteed investment products are fully matched with tangible assets at maturity. Discovery Life uses reinsurance to mitigate the risk that these cash flows are insufficient to build-up the required tangible asset backing (for example, under a severe lapse stress).

As a result of this structure, a significant portion of the early duration free cash flows (years 1 to 5) generated by the Risk existing business are earmarked to build-up the tangible asset backing of the guaranteed investment products (represented by the grey shaded area in graph 3 below). The portion of cash flows earmarked to build-up the tangible asset backing decreases over a 5 year term as existing guaranteed investment products mature. This structure therefore contributes towards the impression of a steeply increasing profile of cash flows over the first 5 years by reducing the net emergence of value at the short-end. This is however well understood by management and is easy to model and predict.

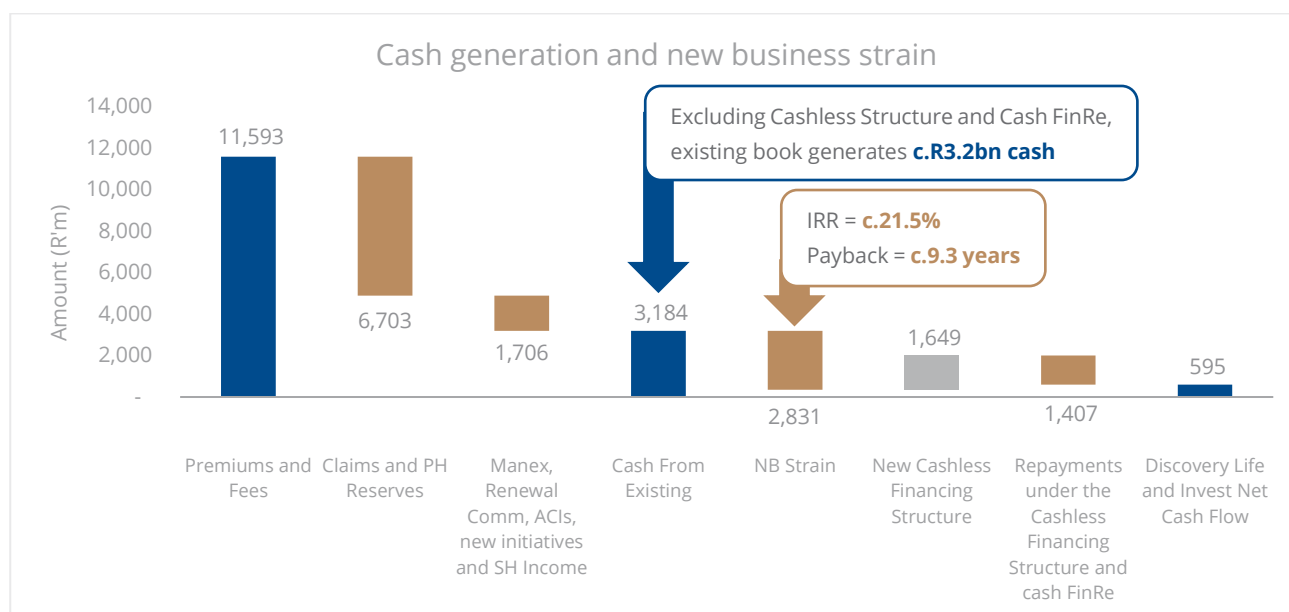
Cash financing reinsurance: The gold shaded area in graph 3 represents future repayments due under cash financing treaties written. These repayments are funded from the existing business cash flows and further contribute to the apparent initial upward sloping cash flow profile. No new cash FinRe treaties were entered into over the course of FY2017. Unlike the cashless financing structure which is currently in perpetual use on a rolling 5 year funding basis, the cash financing reinsurance is employed on an ad-hoc basis.

Graph 3: Nominal undiscounted net profile of value emergence (after financing reinsurance, the cashless financing structure and tax) of Discovery Life’s in-force book at June 2017 including projected cash outflows in respect of the cashless financing structure (shaded blue) and cash outflows in respect of cash financing reinsurance (shaded gold)



Both graphs 1 and 3 highlight that Discovery Life's existing business is projected to generate significant value (and free cash flow). From the build-up in graph 4 below, existing business generated c.R3.18bn in cash in FY2017 excluding both repayments on FinRe as well as new business strain due to new benefits on existing business (and excludes strain on new policies which is shown separately). The existing business cash flow was used to finance c.R2.83bn of new business strain. The Cashless Financing Structure enables Discovery Life to finance new business (including new benefits on the in-force book of policies) without recourse to other capital sources. Further, management is comfortable with the investment of this cash flow in new business given the expected IRR on the new business sold has exceeded the internal target of risk-free + 10%.

Graph 4: Discovery Life actual cash generation and allocation thereof in FY2017



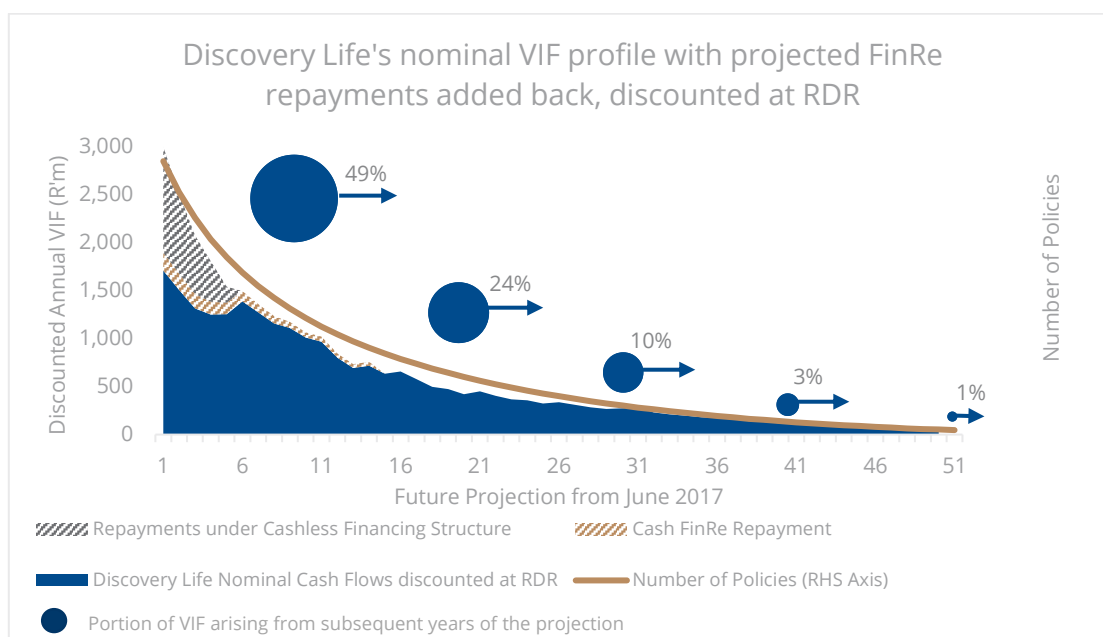
ii. Premium Increase Impact

Dynamic pricing under the shared value model is a fundamental element of the Life policy's integration with Vitality – policyholders receive upfront premium discounts with premiums flexing over time depending on the policyholder's engagement with the Vitality program. The majority of Discovery Life's policies have inflation-linked benefits, while less than 5% of in-force policies have no escalation clauses.

Furthermore, in general lapses are expected to reduce the longer a policy remains in-force. Overall, contractual increases are expected to marginally exceed lapses at later durations. A small net positive premium growth rate is therefore expected and this compounds, in nominal terms, over time. This leads to the upward sloping **nominal** cash flow profile, particularly at later durations.

Graph 5 illustrates the profile of Discovery Life's value emergence discounted to the reporting date at the Risk Discount Rate (RDR). The graph contrasts the discounted VIF run-off profile to the run-off of the number of policies. In addition, the circles on the chart represent the portion of VIF at the reporting date which arises in subsequent decades (starting at year 10) of the projection (for example, 24% of the VIF at the valuation date is due to cash flows arising after 20 years in the projection). Note that the circles to the left includes the value of the circles to the right and hence represent total future VIF from that point onwards.

Graph 5: Nominal net profile of value emergence on Discovery Life's in-force book at June 2017 discounted at the RDR



The graph highlights that the discounted future VIF runs-off in line with the number of policies in-force. While in nominal terms we observe very high later duration cash flows, almost half of the VIF is due to cash flows arising in the first 10 years following the valuation date while only c.10% of the VIF is due to cash flows arising 30 years or more from the valuation date.

Cash flows at later durations (i.e. beyond year 30) only account for a relatively small portion the VIF; the impact on the VIF calculation of estimation error on these cash flows is therefore also considered to be relatively small.

3. Management's confidence in Discovery Life's projected profile of value emergence

The objective of Discovery Life and Invest is to be self-supporting from a capital point-of-view as well as to contribute its share of the dividend to the Group. Discovery Life has achieved this and is confident in its ability to continue meeting this requirement, under realistic new business growth rates. Discovery Life further utilises Financing Reinsurance as a tool to meet these goals and has the ability to increase or reduce the level of Financing Reinsurance utilised to absorb some deviations from expected new business growth as well as experience deviations.

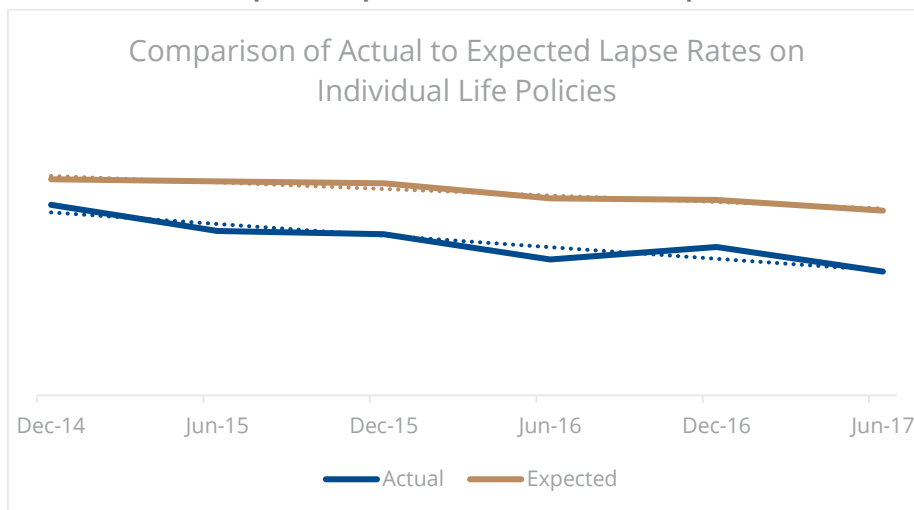
Management is thus confident in the reliability of the predicted long-term cash generative ability of the business shown in graph 1 in section 2 above. The overall reliability of this projection depends chiefly on the long-term persistency and claims rate assumptions used in our models. Our confidence in the projection's reliability is due to robust historic lapse and claims experience in Discovery Life with historic lapse rates showing a decreasing trend over recent time. Although the actual to expected claims experience can be volatile owing to random variations in experience over a short period of time; over the past 14 years, actual mortality and morbidity claims have tracked below expected.

Between FY2010 and FY2017, Discovery Life has had net positive EV experience variances, in spite of a number of items resulting in the observed negative EV variances in FY2016 and FY2017. It is important to note that certain of these items are outside of the company's control and are expected to have an average EV impact of zero over the long-term (i.e. economic experience variances). For other items (i.e. policy alterations), management is currently taking action to reduce the negative EV impact. It is therefore not expected that these negative variances will occur systematically in the future.

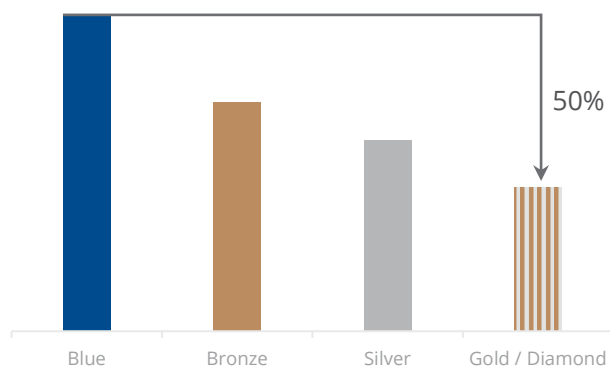
Graph 6 illustrates that both the expected and actual lapse rates in the Life book have trended downward over the past few years, with actual lapse rates consistently below those expected over time. The historic low level of lapses can be attributed in part to the positive impact which the shared-value insurance model has on Discovery Life's business.

Graph 7 illustrates the significant reduction in lapse rates for policyholders highly engaged in the Vitality program. We have observed a significant increase in policyholders with the highest level of engagement (i.e. policyholders on gold and diamond status) since 2008. Policyholders achieving higher statuses receive higher rewards for managing their own health and exhibit statistically significantly better persistency.

Graph 6: Comparison of actual to expected lapse rates on individual life policies

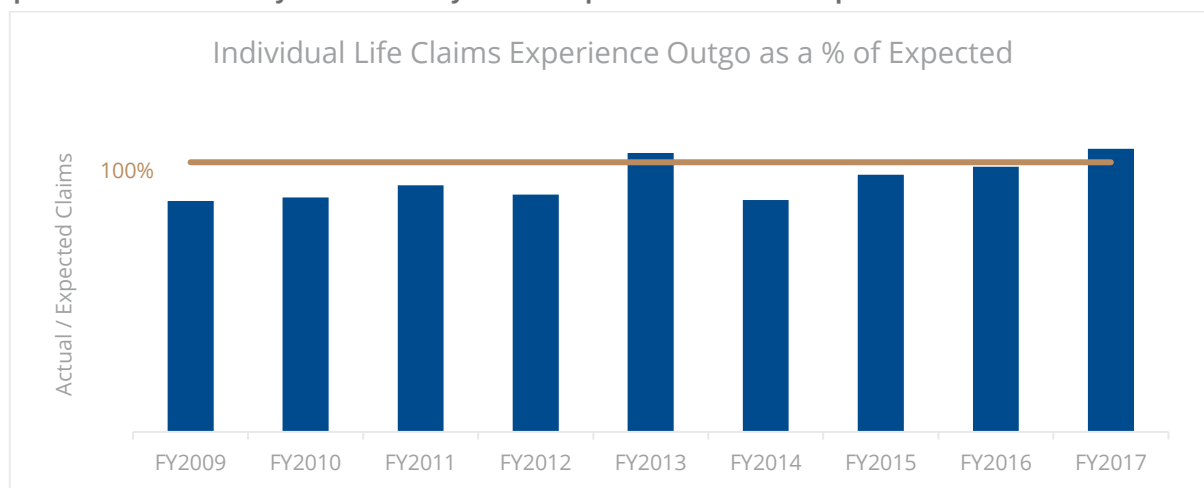


Graph 7: Vitality Engagement Impact on Lapse Rates in FY 2017



In addition to the observed positive lapse experience, claims experience has also been in line with that expected, with actual experience oscillating below 100% (with the exception of HY2 2017) of the expected claims rate as illustrated by Graph 8. The increase in actual claims in HY2 2017 relative to expected has been investigated and is in part driven by random variation in experience, with a large increase in non-natural deaths being observed in particular.

Graph 8: Historic Mortality and Morbidity Claims experience as a % of expected



Management therefore has confidence in the demographic assumptions underlying the projections and believes that they represent slightly prudent long-term best estimates of expected experience on the book.

4. Discovery Life's cash generation

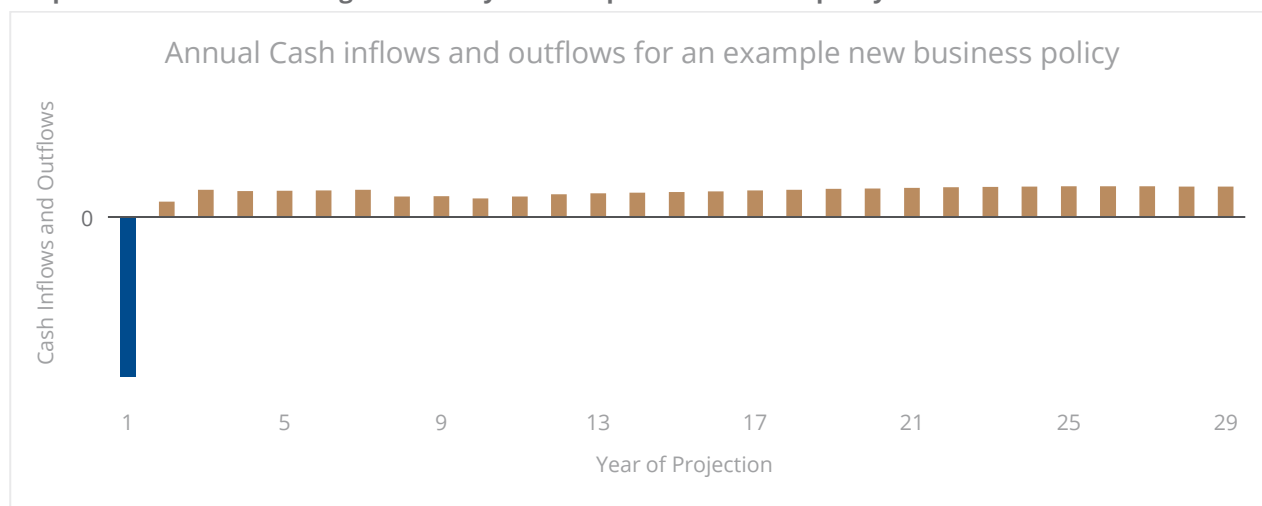
Discovery Life is cash flow generative, with a large portion of the cash generated by existing business being reinvested to finance new business growth. After allowing for new business and the cashless financing reinsurance structure, Discovery Life generated R595m of cash flow in FY 2017. Cumulatively ignoring time value of money, the dividends paid by Discovery Life to the Group has exceed historic cash injections into the business (on an undiscounted basis) by c.R240m.

Given the significant year-on-year new business growth achieved by Discovery Life over the last 15 years (c25.5% p.a. since June 2001 and c17.7% p.a.² since June 2002), management is pleased by the level of cash generated and specifically that the business has generated more cash payments as opposed to capital injected into the business.

It should be noted that a growing Life book requires a significantly long period of time before becoming cash generative. To illustrate this point, consider graphs 9 and 10 below. Graph 9 shows the cash flow profile on an example illustrative new business policy³. This policy becomes cash generative after c.8 years. If it is assumed that the same policy is sold annually (assuming the level of new business grows at 15% p.a.), the resulting book only becomes cash generative after c.25 years (as shown in graph 10). Although this is a simplified hypothetical example, it illustrates that significant investment in Life new business delays the emergence of cash for a significant period of time.

Management is comfortable with the investment of emerging cash flow in new business given the expected IRR on the new business sold has exceeded the internal target of risk-free + 10%.

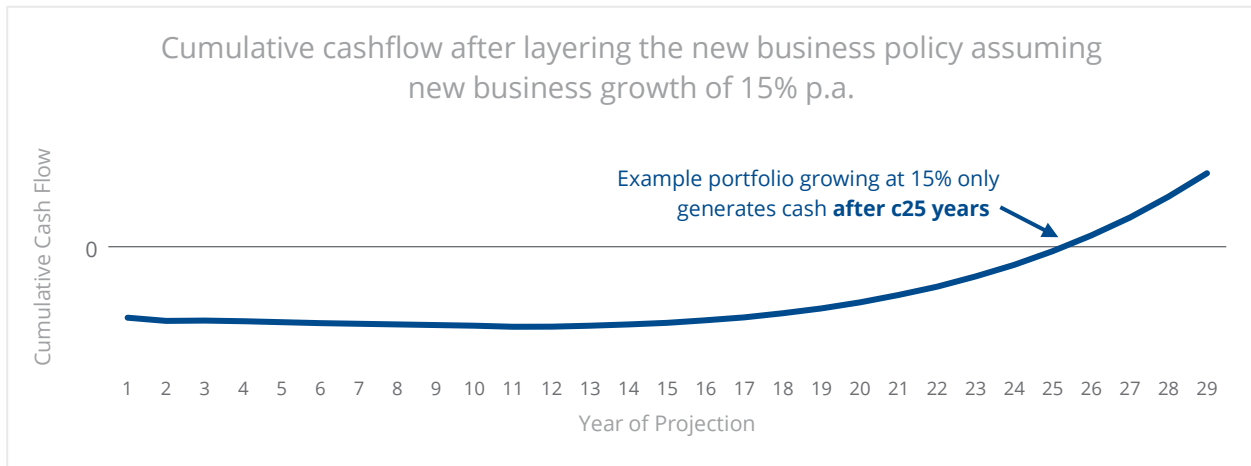
Graph 9: Annual cash flows generated by an example new business policy



² Excluding Servicing and Annual Contribution Increases

³ The example assumes a 40 year old, class 1 non-smoking male with an AcceleRater premium funding pattern.

Graph10: Cumulative cash flows after layering the new business model point considered in graph 9, with an assumed rate of growth in new business of 15% p.a.



5. Conclusion

- Discovery Life's cash flow profile is well understood by management, with the impact of the cashless financing structure on early duration cash flows being very material.
- The reliance on cash flows beyond year 30 is less material to the VIF than typically understood.
- Key items of experience (e.g. lapse experience on the Discovery Life Risk book) are improving by duration.