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Challenger Limited ACN 106 842 371

# 1H18
# Analyst Pack

31 December 2017

Providing our customers with financial security for retirement

challenger

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**2018 Interim Financial Report**

can be downloaded from Challenger's online Shareholder Centre

**challenger.com.au/share**

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**Important Note**

Information presented in the 1H18 Analyst Pack is presented on an operational basis (rather than statutory) to reflect a management view of the business. Challenger Limited (ACN 106 842 371) also provides statutory reporting as prescribed under the Corporations Act 2001. The half year financial report is available from Challenger's website at www.challenger.com.au.

The analyst pack is not audited. The statutory net profit after tax as disclosed in the consolidated profit and loss (see page 7) has been prepared in accordance with Australian Accounting Standards and the Corporations Act 2001. Challenger's external auditors, Ernst & Young, have reviewed the statutory net profit after tax as disclosed in the consolidated profit and loss. Normalised net profit after tax, as disclosed in the consolidated profit and loss (see page 7) has been prepared in accordance with a normalised profit framework. The normalised profit framework has been disclosed in the Operating Financial Review section of the Directors' Report in the Challenger Limited 2018 Interim Financial Report. The normalised profit after tax has been subject to a review performed by Ernst & Young.

Any forward looking statements included in this document are by nature subject to significant uncertainties, risks and contingencies, many of which are outside the control of, and are unknown to, Challenger, so that actual results or events may vary from those forward looking statements, and the assumptions on which they are based.

Past performance is not an indicator of future performance. While Challenger has sought to ensure that information is accurate by undertaking a review process, it makes no representation or warranty as to the accuracy or completeness of any information or statement in this document. In particular, information and statements in this document do not constitute investment advice or a recommendation on any matter, and should not be relied upon.

# 1H18 financial highlights

## Group

- Normalised net profit before tax $275m, up 8%
- Normalised net profit after tax[1] $208m, up 6%
- Statutory net profit after tax[1] $195m, down 3%
- Normalised EPS 35.2 cents per share, up 1%
- Statutory EPS 33.1 cents per share, down 8%
- Net income $409m, up 7%
- Expenses $131m, up 4%
- Normalised cost to income ratio improved by 80 bps to 32.1%
- Group assets under management $77bn, up 18%
- Normalised return on equity 16.8% (pre-tax), down 190 bps
- Half year dividend 17.5 cents per share (fully franked), up 3%
- Normalised dividend payout ratio 50%

## Life

- Cash Operating Earnings (COE) $336m, up 6%
- COE margin 4.05%, down 14 bps from 2H17
- Expenses $53m, up 7%
- EBIT $283m, up 6%
- Total Life sales $3.3bn, up 21%
- Total Life book growth $948m (or 7.9% of opening liabilities), up 12%
- Annuity sales $2.3bn, up 4%
- Annuity book growth $758m (or 7.3% of opening liabilities), up 69%
- Investment assets $17.0bn, up 17%
- Normalised Return on Equity 19.0% (pre-tax), down 250 bps
- Prescribed Capital Amount (PCA) ratio 1.49 times, down from 1.57 times at 2H17
- Common Equity Tier 1 (CET1) ratio 1.02 times, up from 1.01 times at 2H17

## Funds Management

- Net income $72m, up 10%
- Expenses $45m, up 1%
- EBIT $27m, up 31%
- Net flows $3.9bn, up 22%
- Funds Under Management $73.4bn, up 18%
- Return on Equity 27.6% (pre-tax), up 440 bps

1 Normalised net profit after tax excludes investment experience, being unrealised gains and losses on Life's investment assets and liabilities valued at fair value (refer to page 49 for more detail). In 1H18, investment experience is the only difference between normalised and statutory net profit after tax.

# Market overview and outlook

The Australian superannuation system is underpinned by mandatory contributions, which are scheduled to increase from 9.5% of gross salaries to 12.0% by 2025. Due to the mandated nature of Australia's superannuation system, Australia has the fourth largest pension market globally[1] and is expected to grow strongly over the next 20 years. The superannuation system is forecast to grow from $2.5 trillion today to over $10 trillion by 2035[2].

Both the Life and Funds Management businesses benefit from growth in Australia's superannuation system. The Funds Management business targets the retirement savings (or accumulation) phase of superannuation by providing investment products seeking to deliver superior investment returns to help build retirement savings. The Life business targets the retirement spending (or retirement) phase of superannuation by providing investment products that convert savings into safe and secure retirement incomes.

## Life

The retirement spending phase of superannuation is expected to grow strongly over the next 20 years as a result of demographic changes. The number of Australians over the age of 65, which is Life's target market, is expected to increase by ~70%[2] over the next twenty years.

Reflecting the demographic changes underway, and growth in Australia's superannuation system, the annual transfer from the retirement savings phase to the retirement spending phase is estimated to be ~$60bn[3] in 2018. Annuities currently capture less than 5% of the annual transfer to the retirement phase.

There is growing recognition that retirees need to take a different approach to investing in retirement. As retirees transition from Government funded aged pensions to private pensions, retirees are demanding safe, secure retirement income products that convert savings to income and provide financial security. Annuities address these retiree needs.

There are a range of retirement income regulatory reforms currently underway (refer to page 24 for more detail), which are designed to enhance the retirement phase of superannuation. These reforms provide a significant opportunity to increase the proportion of retirement savings invested in longevity products, including annuities.

The retirement phase of superannuation is a high growth market driven by ageing demographics, rising superannuation balances from mandatory contributions and changes in retiree risk preferences. As Australia's leading annuities provider, Challenger Life Company Limited (CLC) is expected to continue to benefit from this growth over the long-term.

CLC is diversifying its product range and expanding distribution relationships outside of Australia. In 2016, CLC commenced an annuity relationship with Mitsui Sumitomo Primary Life Insurance Company Limited (MS Primary), a subsidiary of MS&AD Insurance Group Holdings Inc. (MS&AD). MS Primary is a leading provider of Australian dollar denominated annuity products in Japan (refer to page 23 for more detail). This relationship provides access to Japan's Australian dollar annuities market, which is multiple times the size of Australia's.

Japan has one of the world's most rapidly ageing populations and Japan has a very low domestic interest rate environment, which is making higher returning foreign currency annuities popular. CLC is well placed to build on the MS Primary annuity relationship and is working with MS Primary to develop a new lifetime annuity product specifically for the Japanese market.

MS Primary is one of Challenger's key distributors and in recognition of the importance of the relationship, Challenger formed a strategic relationship with its parent MS&AD in August 2017. The strategic relationship will increase access to the Japanese market and broaden Challenger's existing international footprint, whilst providing opportunities for both MS&AD and Challenger. As part of the MS&AD strategic relationship, and in order to support Challenger's growth ambitions, a $500 million equity placement to MS&AD was completed in August 2017. The equity placement represented 6.3% of Challenger's issued capital, with MS&AD subsequently increasing their shareholding to ~10% via on market acquisitions.

## Funds Management

Challenger's Funds Management business has experienced significant FUM growth over the past five years, with $27 billion[4] of net inflows and FUM more than doubling.

Challenger's Funds Management business is growing significantly faster than the broader Australian funds management market and is attracting superior net flows. This growth can be attributed to the strength of Challenger's retail and institutional distribution teams, a market leading Funds Management business model that focuses on investor alignment and strong investment performance.

Challenger's Fidante Partners' business model comprises interests in separately branded boutique fund managers, with Challenger providing the distribution, administration and business support, leaving managers to focus on managing investment portfolios. This strong investor alignment is driving superior long-term investment performance, with 97% of Fidante Partners' funds outperforming their benchmark[5]. This long-term performance track record is underpinning net flows, with $4 billion of net flows in 1H18, representing 6% of opening FUM.

Following the success of Challenger's Fidante Partners business model in Australia, it is being replicated in Europe, providing access to the £7 trillion United Kingdom funds management market[6], and opening up global distribution opportunities for existing investment managers. As part of its expansion, Fidante Partners is attracting new international managers.

Challenger has identified funds management opportunities in Japan, with increased access to the market via the MS&AD strategic relationship. In recognition of this, Challenger opened a Tokyo office in 2H17 and is in the process of applying for Japanese funds management licences.

Funds Management is expected to continue to benefit from Challenger's distribution capability, superior long-term investment performance, and international expansion. This provides a strong base to continue to grow the business and achieve Challenger's vision of providing customers with financial security for retirement.

1 Willis Tower Watson Global Pension Study 2017.
2 Deloitte – Dynamics of the Australian superannuation system: the next 20 years 2015-2035.
3 Australian Taxation Office.
4 Excluding derecognition of Kapstream following the sale in July 2015.
5 Percentage of Fidante Partners' funds meeting or exceeding performance benchmark over five years.
6 The Investment Association Annual Survey 2015-2016.

# Vision and strategy

## To provide our customers with financial security for retirement

Increase the Australian retirement savings pool allocation to secure and stable incomes

Be recognised as the leader and partner of choice in retirement income solutions with a broad product offering

Provide customers with relevant investment strategies exhibiting consistently superior performance

Deliver superior outcomes to customers and shareholders through a highly engaged, diverse and agile workforce committed to sustainable business practices and a strong risk and compliance culture

# 1H18 strategic progress

Increase the Australian retirement savings pool allocation to secure and stable incomes

## Grow allocation to secure and stable retirement incomes

Annuities currently capture less than 5% of the annual transfer from the retirement savings (accumulation) to the retirement spending (retirement) phase. Challenger is focused on growing the allocation of the Australian retirement savings pool allocated to secure and stable incomes.

1H18 progress includes:

### Life sales

- $3.3bn of total Life sales, up 21% on 1H17;
- $2.3bn of annuity sales, up 4% on 1H17; and
- $1.0bn of other Life sales, representing institutional guaranteed rate products, up 84% on 1H17.

### Life sales mix and focus on long-term products

Challenger's annuity sales mix is evolving to long-term products. Long-term products include lifetime annuities and 20 year fixed rate annuities distributed via MS Primary. 1H18 long-term annuity sales represented 36% of total annuity sales, up from 31% in 1H17 and 14% in 1H16.

### Tools for financial advisers

Challenger's market leading retirement illustrator was launched in FY17 in order to support advisers and the para-planning process. The retirement illustrator provides scenario modelling to demonstrate the benefits of partial annuitisation. In 1H18 Challenger's retirement illustrator was enhanced and made available to a number of superannuation funds via white label arrangements.

### Superannuation reforms engagement and advocacy

The Australian Government is undertaking a range of superannuation reforms aimed at enhancing the retirement phase of superannuation. Specifically, the Government is engaging with industry on its MyRetirement reforms (refer to page 24 for more detail) and new means testing rules for lifetime retirement income streams.

As Australia's leading retirement income provider, Challenger is actively engaging with the Government on these reforms and is contributing to the advocacy process. These are important reforms which will take time for the Government to fully implement.

The industry is moving ahead of these reforms with MyRetirement style products starting to emerge. These products recommend combining account based pensions with products that provide longevity protection, such as annuities. Challenger is playing a leading role in educating financial advisers and superannuation funds on the benefits of partial annuitisation.

**Launch of Deferred Lifetime Annuities (DLAs)**

On 1 July 2017 new retirement income rules were implemented, which provide a framework for product innovation, including Deferred Lifetime Annuities (DLAs). DLAs are single premium products that provide regular and reliable income commencing after a deferral period. DLAs are expected to provide a building block for MyRetirement products (see page 24 for more detail) and will help increase Australian retirement savings allocated to secure and stable incomes.

Challenger launched a DLA in September 2017 and was the first Australian life insurer to offer a DLA. Future DLA sales are expected to be supported by new means testing arrangements for lifetime retirement income streams.

Be recognised as the leader and partner of choice in retirement income solutions with a broad product offering

## Be the market leader and partner of choice in retirement income solutions

Challenger is the market leader in retirement incomes with 68%[1] annuity market share. As an independent provider, Challenger's strategy includes being the partner of choice for superannuation funds and wealth managers for retirement income solutions.

1H18 progress includes:

**Leading adviser and consumer ratings**

Amongst Australian financial advisers, Challenger continues to be the most recognised retirement income brand. The latest Marketing Pulse Adviser Study showed:

- Challenger's brand awareness amongst financial advisers increased to 89% in December 2017, up from 85% in December 2016;
- Challenger continues to be recognised by financial advisers as the leader in retirement income, with 93% of financial advisers either agreeing or strongly agreeing with this statement. Challenger has maintained its leading position with a score 30 percentage points above its nearest competitor; and
- Financial advisers recognise Challenger as a retirement income thought leader, with 77% of financial advisers either agreeing or strongly agreeing with this proposition.

**Increased product access via investment and administration platforms**

Challenger's strategic priorities include making its annuity products available on leading investment and administration platforms, allowing financial advisers and their customers easy and efficient access to Challenger annuities.

In September 2017, Challenger's full range of annuity products were made available via AMP's adviser portal to their retail and corporate superannuation customers. In order to support Challenger annuities and the advice process, Challenger's retirement income tools and calculators have been made available to AMP advisers. AMP also provides retirement model portfolio guidance to its advisers.

Challenger is making its annuities available on the new innovative BT Panorama platform. The launch of Challenger annuities on the BT Panorama platform is targeted for the June 2018 quarter.

**Leverage MS&AD strategic relationship and expand into Japanese market**

In November 2016, Challenger commenced issuing Australian dollar fixed rate annuities with a 20-year term in order to support a reinsurance agreement with MS Primary. As Australia's leader in retirement incomes, MS Primary were attracted to Challenger's ability to manage long-term assets and liabilities, Challenger's approach to risk management and product innovation experience.

The MS Primary annuity relationship has contributed 17% of Challenger's 1H18 annuity sales. Challenger and MS Primary are developing a new lifetime annuity product for the Japanese market.

Given the success of the annuity relationship with MS Primary, in August 2017 Challenger formed a strategic relationship with MS&AD in order to increase access to the Japanese market and provide opportunities for both Challenger and MS&AD.

1 Strategic Insights – September 2017.

Provide customers with relevant investment strategies exhibiting consistently superior performance

## Provide relevant and superior investment strategies for customers

Challenger is focused on providing relevant investment strategies that exhibit superior investment performance in order to help build retirement savings.

1H18 progress includes:

### Maintaining superior investment performance

Fidante Partners' has a long track record of achieving superior investment performance, which is helping attract superior net flows. Over the year to 31 December 2017, 90%[1] of Fidante Partners funds outperformed their benchmark. Over five years 97%[1] of funds have outperformed their benchmark.

### Adding boutiques and strategies

In February 2018, Challenger announced a new boutique partnership with Garelick Capital Partners. Garelick Captial Partners is a Boston based equities manager and will form part of Fidante Partners Europe.

In 1H18 a number of new strategies for existing boutiques were launched, including:

- Ardea's Real Outcome strategy for retail investors;
- Avenir Capital made available to retail investors;
- Lennox Capital launching a microcap strategy; and
- Merlon Capital Partners Concentrated Value Strategy for retail investors.

Deliver superior outcomes to customers and shareholders through a highly engaged, diverse and agile workforce committed to sustainable business practices and a strong risk and compliance culture

## Sustainable business practices to deliver superior outcomes

Challenger believes maintaining a highly engaged, diverse and agile workforce committed to sustainable business practices and a strong risk and compliance culture will provide customers and shareholders with superior outcomes.

1H18 progress includes:

### Employee engagement

A highly engaged workforce helps deliver superior shareholder outcomes. Challenger's 2017 employee engagement score was five percentage points above the global high performing company norm. Challenger's next employee engagement survey is scheduled for late calendar year 2018.

### Diversity

Challenger seeks to create an inclusive workforce and values the capability and experience that diversity brings to the organisation. To encourage greater representation of women at senior levels of the organisation, Challenger continues to develop initiatives targeted at improving gender equality, including setting gender diversity targets. Diversity targets were set in December 2015 and Challenger has already exceeded its mid-term targets and is on track to exceed its FY20 targets.

### Maintain superior cost to income ratio

Challenger's business is highly scalable and efficient. In 1H18 Challenger's normalised cost to income ratio was 32.1%, a record low and at the mid-point of Challenger's guidance range (30% to 34%). Over the last decade Challenger's normalised cost to income ratio has fallen by 13 percentage points and is 17 percentage points below the industry average[2].

1 Percentage of Fidante Partners' funds meeting or exceeding performance benchmarks over one and five years.

2 Includes Australian and New Zealand Banking Corporation, AMP , Bank of Queensland, Bendigo and Adelaide Bank, BT Investment Management, Commonwealth Bank of Australia, IOOF, Macquarie Bank, Magellan Financial Group , National Australia Bank, Perpetual and Westpac Banking Corporation.

# Key performance indicators

| | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| **Earnings** | | | | | |
| Normalised NPAT ($m) | 207.9 | 188.3 | 196.6 | 179.6 | 182.1 |
| Statutory NPAT ($m) | 195.4 | 196.1 | 201.5 | 93.4 | 234.3 |
| Normalised EBIT ($m) | 277.5 | 253.9 | 256.4 | 232.8 | 238.7 |
| Underlying operating cash flow ($m) | 53.8 | 131.4 | 168.5 | 149.7 | 147.4 |
| Normalised cost to income ratio (%) | 32.1% | 33.9% | 32.9% | 35.4% | 33.8% |
| Normalised effective tax rate (%) | 24.3% | 24.9% | 22.6% | 22.3% | 23.0% |
| **Earnings per share (cents)** | | | | | |
| Basic – normalised | 35.2 | 33.5 | 35.0 | 32.0 | 32.6 |
| Basic – statutory | 33.1 | 34.9 | 35.8 | 16.6 | 41.9 |
| Diluted – normalised | 33.8 | 32.1 | 33.3 | 30.3 | 30.5 |
| Diluted – statutory | 31.9 | 33.4 | 34.1 | 16.3 | 39.0 |
| **Return on equity (%)** | | | | | |
| Normalised Return on Equity (RoE) – pre tax | 16.8% | 18.0% | 18.7% | 17.4% | 18.1% |
| Normalised Return on Equity (RoE) – post tax | 12.7% | 13.5% | 14.5% | 13.6% | 14.0% |
| Statutory Return on Equity (RoE) – post tax | 11.9% | 14.0% | 14.8% | 7.1% | 18.0% |
| **Capital management** | | | | | |
| Net assets – average[1] ($m) | 3,249 | 2,818 | 2,694 | 2,664 | 2,592 |
| Net assets – closing ($m) | 3,470 | 2,888 | 2,781 | 2,681 | 2,696 |
| Net assets per basic share ($) | 5.75 | 5.14 | 4.95 | 4.80 | 4.80 |
| Net tangible assets ($m) | 2,878 | 2,300 | 2,192 | 2,097 | 2,111 |
| Net tangible assets per basic share ($) | 4.77 | 4.09 | 3.90 | 3.75 | 3.75 |
| Dividend (cps) | 17.5 | 17.5 | 17.0 | 16.5 | 16.0 |
| Dividend franking (%) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Normalised dividend payout ratio (%) | 49.7% | 52.2% | 48.6% | 51.6% | 49.1% |
| **Sales, net flows and assets under management** | | | | | |
| Life annuity sales ($m) | 2,289.5 | 1,815.1 | 2,196.1 | 1,710.1 | 1,641.1 |
| Other Life sales ($m) | 1,034.5 | 378.9 | 562.3 | 588.8 | 409.7 |
| Total Life sales ($m) | 3,324.0 | 2,194.0 | 2,758.4 | 2,298.9 | 2,050.8 |
| Life annuity flows ($m) | 758.2 | 451.5 | 448.9 | 469.9 | 270.5 |
| Life annuity book ($m) | 11,115.8 | 10,322.2 | 9,784.9 | 9,558.5 | 8,868.4 |
| Life annuity book growth | 7.3% | 4.7% | 4.7% | 5.4% | 3.1% |
| Total Life flows ($m) | 947.9 | 469.5 | 843.4 | 721.2 | 347.1 |
| Total Life book[2] ($m) | 13,025.1 | 12,010.0 | 11,418.1 | 10,874.0 | 9,903.5 |
| Total Life book growth | 7.9% | 4.3% | 7.8% | 7.5% | 3.6% |
| Funds Management – net flows[3] ($m) | 3,934.3 | 3,003.5 | 3,217.1 | 1,839.2 | (4,356.4) |
| Total Group assets under management ($m) | 76,523 | 69,988 | 64,705 | 60,051 | 57,617 |
| **Other** | | | | | |
| Headcount – closing FTEs | 682 | 655 | 632 | 635 | 618 |
| Weighted average number of basic shares on issue (m) | 591.1 | 562.1 | 562.3 | 561.2 | 559.1 |
| Number of basic shares on issue (m) | 603.3 | 561.9 | 562.3 | 558.8 | 562.2 |
| Share price closing ($) | 13.99 | 13.34 | 11.24 | 8.63 | 8.72 |

1 Net assets – average calculated on a monthly basis.
2 Total Life book includes the Life annuity book, Guaranteed Index Return and Challenger Index Plus Fund liabilities.
3 Funds Management 1H16 net flows include $5.4bn derecognition of Kapstream following the sale in July 2015.

# Consolidated profit and loss

| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| Cash earnings | 276.4 | 261.1 | 265.3 | 247.4 | 244.5 |
| Normalised capital growth | 59.7 | 53.9 | 51.1 | 52.1 | 48.4 |
| **Normalised Cash Operating Earnings (COE)** | **336.1** | **315.0** | **316.4** | **299.5** | **292.9** |
| | | | | | |
| Net fee income | 72.0 | 68.7 | 65.3 | 60.6 | 67.1 |
| Other income | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 |
| **Total net income** | **408.6** | **384.1** | **382.1** | **360.5** | **360.6** |
| | | | | | |
| Personnel expenses | (91.0) | (91.4) | (87.9) | (89.0) | (83.8) |
| Other expenses | (40.1) | (38.8) | (37.8) | (38.7) | (38.1) |
| **Total expenses** | **(131.1)** | **(130.2)** | **(125.7)** | **(127.7)** | **(121.9)** |
| | | | | | |
| **Normalised EBIT** | **277.5** | **253.9** | **256.4** | **232.8** | **238.7** |
| | | | | | |
| Interest and borrowing costs | (2.9) | (3.0) | (2.3) | (1.8) | (2.3) |
| **Normalised profit before tax** | **274.6** | **250.9** | **254.1** | **231.0** | **236.4** |
| | | | | | |
| Normalised tax | (66.7) | (62.6) | (57.5) | (51.4) | (54.3) |
| **Normalised profit after tax** | **207.9** | **188.3** | **196.6** | **179.6** | **182.1** |
| | | | | | |
| Investment experience after tax | (12.5) | 7.8 | 4.9 | (86.2) | 30.1 |
| Significant items after tax[1] | – | – | – | – | 22.1 |
| **Statutory net profit after tax** | **195.4** | **196.1** | **201.5** | **93.4** | **234.3** |
| | | | | | |
| **Performance analysis** | | | | | |
| Normalised earnings per share – basic (cents) | 35.2 | 33.5 | 35.0 | 32.0 | 32.6 |
| Shares for basic EPS calculation (m) | 591.1 | 562.1 | 562.3 | 561.2 | 559.1 |
| Normalised cost to income ratio | 32.1% | 33.9% | 32.9% | 35.4% | 33.8% |
| Normalised effective tax rate | 24.3% | 24.9% | 22.6% | 22.3% | 23.0% |
| | | | | | |
| **Total net income analysis** | | | | | |
| Cash earnings (Life) | 67.7% | 68.0% | 69.4% | 68.6% | 67.8% |
| Normalised capital growth (Life) | 14.6% | 14.0% | 13.4% | 14.5% | 13.4% |
| Net fee income (Funds Management) | 17.6% | 17.9% | 17.1% | 16.8% | 18.6% |
| Other income (Corporate) | 0.1% | 0.1% | 0.1% | 0.1% | 0.2% |
| | | | | | |
| **Normalised EBIT by division** | | | | | |
| Life | 283.0 | 264.2 | 267.0 | 250.9 | 248.9 |
| Funds Management | 27.1 | 24.4 | 20.7 | 15.8 | 21.6 |
| Corporate | (32.6) | (34.7) | (31.3) | (33.9) | (31.8) |
| **Normalised EBIT** | **277.5** | **253.9** | **256.4** | **232.8** | **238.7** |

1 1H16 significant items after tax primarily represents the gain on sale of Challenger's equity investment in Kapstream, offset by boutique impairments and office relocation costs.

# Consolidated profit and loss

## Normalised net profit after tax

1H18 normalised profit after tax was $208m, up $11m (6%) from $197m in 1H17. The increase in normalised profit after tax includes a $21m (8%) increase in EBIT, partially offset by a $1m increase in interest and borrowing costs, and a $9m increase in normalised tax.

The increase in EBIT reflects higher Group assets under management, which increased net income by $26m (7%), partially offset by a $5m (4%) increase in expenses.

## Normalised earnings per share (EPS)

Normalised EPS increased by 1% from 35.0 cps in 1H17 to 35.2 cps in 1H18. The increase in normalised EPS reflects higher normalised profit after tax (up 6%), partially offset by a 5% increase in the number of weighted average shares on issue. The number of shares on issue increased in August 2017 as a result of the $500m equity placement to MS&AD (refer to page 23 for more detail).

## Net income

Net income increased by $26m (7%) in 1H18 due to:

- Life Cash Operating Earnings (COE) increasing by $20m (up 6%) due to higher average investment assets (up 15%), partially offset by a reduction in Life's COE margin. Life's COE margin was impacted by a change in product mix (refer to page 19 for more detail) and 1H17 including a one-off Life risk fee; and
- Funds Management fee income increased $7m (up 10%), benefiting from an increase in average Funds Under Management (FUM) (up 20%), and a higher contribution from performance fees (up $5m), offset by lower Fidante Partners Europe transaction fees.

## Expenses

1H18 total expenses were $131m, up $5m (4%) on 1H17. The increase in expenses predominately relates to higher personnel costs (up $3m), from an increase in employee numbers. The number of full time equivalent (FTE) employees at 31 December 2017 (1H18) was 682 employees and increased by 8% on 1H17.

The 1H18 normalised cost to income ratio decreased by 80 bps to a record low 32.1%, and is at the mid-point of Challenger's normalised cost to income ratio guidance range, which was lowered to between 30% and 34% at the start of the FY18 financial year.

Challenger has a highly scalable business and is one of Australia's most efficient financial services companies. Over the past decade, Challenger's normalised cost to income ratio has fallen by 13 percentage points and is currently 17 percentage points lower than the average for ASX100 banks and diversified financial companies[1].

## Normalised EBIT

1H18 normalised EBIT was $277m, and increased by $21m (8%) from $256m in 1H17. Life EBIT increased by $16m (6%), Funds Management EBIT increased by $6m (31%) and Corporate EBIT decreased by $1m (4%).

The increase in Life normalised EBIT (up 6%) reflects higher Life average investment assets, partially offset by a 34 bps reduction in Life's COE margin (refer to page 19 for more detail).

The increase in Funds Management EBIT (up 31%) reflects higher average FUM (up 20%), a higher contribution from performance fees (up $5m) and realising scale benefits. Funds Management net income increased by 10% whilst expenses increased by 1%.

Corporate EBIT (down 4%) reflects higher personnel expenses (up $2m) as a result of an increase in employee numbers.

## Normalised Return on Equity (ROE)

1H18 normalised ROE was 16.8% (pre-tax) and decreased by 190 bps from 1H17. The reduction in normalised ROE was due to higher levels of capital held following the equity placement to MS&AD. in August 2017. 1H18 Group average net assets were $3.2bn, up $0.5bn (21%) on 1H17.

Challenger targets a pre-tax normalised ROE of 18% over the medium-term, and has a long track record of achieving it. Challenger expects normalised ROE to increase from 1H18 as the benefits from the new capital are generated.

## Normalised tax

Normalised tax was $67m in 1H18, up $9m on 1H17. Higher normalised tax reflects higher EBIT (up $21m) and a higher normalised effective tax rate.

The 1H18 normalised effective tax rate was 24.3%, up from 22.6% in 1H17. The increase in the normalised effective tax rate was largely due to interest payments for both Challenger Capital Notes and Challenger Capital Notes 2 (refer to page 14 for more detail) not being tax deductible as they include a franked component as part of the distribution.

For FY18, Challenger expects a normalised effective tax rate in the range of between 24% and 26%.

1 Includes Australian and New Zealand Banking Corporation, AMP , Bank of Queensland, Bendigo and Adelaide Bank, BT Investment Management, Commonwealth Bank of Australia, IOOF, Macquarie Bank, Magellan Financial Group , National Australia Bank, Perpetual and Westpac Banking Corporation.

### Investment experience after tax

Challenger Life is required by Australian accounting standards to value investment assets and liabilities supporting the Life business at fair value. This gives rise to fluctuating valuation movements on investment assets and liabilities being recognised in the profit and loss. Challenger is generally a long-term holder of assets, due to them being held to match the term of life contract liabilities. As a result, Challenger takes a long-term view of the expected capital growth of the portfolio rather than focusing on short-term movements.

Investment experience relates to the Life business and pre-tax investment experience is disclosed as part of Life's financial results.

1H18 investment experience was a pre-tax loss of $22m (refer to page 20 for more detail), or $13m post-tax. 1H18 post-tax investment experience includes a benefit ($3m) as a result of lower deferred tax liabilities following a reduction in the United States corporate tax rate.

### Significant one-off items

Significant one-off items represent non-recurring and abnormal income and expense items. There were no significant one-off items in 1H18.

### Statutory net profit after tax

Statutory net profit includes after tax investment experience and significant one-off items.

Statutory net profit after tax in 1H18 was $195m, down $6m (3%) from $201m in 1H17. The decrease in statutory net profit after tax reflects higher normalised profit after tax (up $11m) offset by lower after tax investment experience (down $17m).

## Dividends

### Interim 1H18 dividend

The Board has declared a 1H18 dividend of 17.5 cents per share, which is 3% higher than the 1H17 dividend. Dates for the 1H18 dividend are as follows:

- Ex-date: 27 February 2018;
- Record date: 28 February 2018;
- Final DRP election date: 1 March 2018; and
- Dividend payment date: 27 March 2018.

The 1H18 normalised dividend payout ratio was 49.7%, and is within Challenger's normalised dividend payout ratio guidance of between 45% and 50% of normalised profit after tax.

Challenger's franking account balance at 31 December 2017 was $136m.

### Dividend Reinvestment Plan

Challenger operates a Dividend Reinvestment Plan (DRP), providing an effective way for shareholders to reinvest their dividends and increase their shareholding without incurring transaction costs.

The DRP participation rate for the final FY17 dividend (paid in September 2017) was 4% of issued capital, with 0.3m new Challenger shares issued. Under the terms of the DRP, new Challenger shares were issued based on a ten day Challenger share price VWAP, with no share price discount applied.

For the final FY17 dividend, the DRP had the effect of reducing the effective cash dividend payout by approximately 2%.

For the 1H18 dividend, new Challenger shares will be issued in order to fulfil DRP requirements, and will continue to be issued based on a ten day share price VWAP, with no share price discount applied.

## Credit ratings

In November 2017, Standard & Poor's (S&P) completed its annual ratings review and affirmed both Challenger Life Company Limited (CLC) and Challenger Limited's credit ratings, and upgraded the outlook for both from stable to positive. The upgraded outlook reflects Challenger's expanded distribution network and leadership in the Australian annuities market, which is expected to strengthen the quality and resilience of underlying operating earnings.

S&P ratings are as follows:

- CLC: 'A' with a positive outlook; and
- Challenger Limited: 'BBB+' with a positive outlook.

# FY18 guidance

## Normalised net profit before tax

FY18 normalised net profit before tax guidance is a range of between $545m to $565m, representing growth of between 8% to 12%. Challenger in on-track to achieve guidance (1H18 $275m) and has reaffirmed FY18 guidance.

## Normalised Return on Equity (ROE)

Challenger continues to target an 18% pre-tax normalised ROE over the medium term. Challenger expects normalised ROE to increase as earnings from the MS&AD equity placement (refer to page 23 for more detail) are generated. 1H18 normalised ROE was 16.8%.

## Life annuity book maturities

Life's annuity book growth is driven by sales and maturities. With Life's focus on long-term annuity sales, maturities are expected to fall from ~33% of opening liabilities in FY17 to ~25% in FY18. 1H18 maturities were 15% of opening liabilities, with maturities expected to step down to ~10% of opening liabilities in 2H18. Over the medium term, with an ongoing focus on long-term annuity sales, the maturity rate is expected to reduce further.

## Normalised cost to income ratio

Challenger's business is highly efficient and very scalable. As a result, Challenger is one of Australia's most efficient financial services companies, with a normalised cost to income ratio that is 17 percentage points below the industry average.

Reflecting confidence in continuing to extract scale benefits and operating efficiencies across the Challenger Group, Challenger reset its medium-term normalised cost to income ratio guidance at the start of FY18 to a range of 30% to 34% (from 32% to 36%).

The normalised cost to income ratio was 32.1% in 1H18 and is at the mid-point of the new medium-term normalised cost to income ratio guidance.

## Dividend policy

Challenger targets a dividend payout ratio in the range of 45% to 50% of normalised profit after tax and aims to frank dividends to the maximum extent possible. Based on current forecasts, the Board expects future dividends to be fully franked.

However, the actual dividend payout ratio and franking levels will depend on prevailing market conditions and capital allocation priorities.

# Group balance sheet[1]

| $m | 1H18 | FY17 | 1H17 | FY16 | 1H16 |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| **Life investment assets** | | | | | |
| Fixed income and cash (net) | 11,076.5 | 10,415.0 | 9,520.9 | 9,315.5 | 8,487.6 |
| Property (net) | 3,654.6 | 3,407.8 | 3,328.3 | 3,150.0 | 3,063.2 |
| Equity and other investments | 1,642.7 | 1,360.1 | 1,231.6 | 1,079.0 | 1,060.0 |
| Infrastructure (net) | 666.3 | 494.4 | 526.4 | 567.2 | 536.4 |
| **Life investment assets** | **17,040.1** | **15,677.3** | **14,607.2** | **14,111.7** | **13,147.2** |
| | | | | | |
| Cash and cash equivalents (Group cash) | 121.9 | 83.8 | 80.7 | 84.2 | 89.3 |
| Receivables | 155.1 | 135.1 | 121.0 | 120.2 | 148.5 |
| Derivative assets | 243.4 | 232.7 | 226.0 | 354.2 | 292.6 |
| Investment in associates | 54.2 | 53.5 | 49.1 | 51.5 | 30.2 |
| Other assets | 53.3 | 46.0 | 48.2 | 48.0 | 50.7 |
| Fixed assets | 32.2 | 33.7 | 32.9 | 34.9 | 34.3 |
| Goodwill and intangibles | 591.3 | 588.4 | 588.4 | 583.9 | 585.5 |
| Less Group/Life eliminations[2] | (83.8) | (94.9) | (93.2) | (105.3) | (123.0) |
| **Total assets** | **18,207.7** | **16,755.6** | **15,660.3** | **15,283.3** | **14,255.3** |
| | | | | | |
| **Liabilities** | | | | | |
| Payables | 249.1 | 245.5 | 219.8 | 228.6 | 184.9 |
| Tax liabilities | 95.2 | 199.0 | 177.7 | 162.6 | 182.4 |
| Derivative liabilities | 158.7 | 216.5 | 322.7 | 409.5 | 352.8 |
| Subordinated debt | 405.3 | 393.6 | 384.8 | 576.7 | 576.5 |
| Challenger Capital Notes | 791.2 | 789.4 | 339.3 | 338.5 | 337.7 |
| Provisions | 13.6 | 13.5 | 17.4 | 12.5 | 21.3 |
| Life annuity book | 11,115.8 | 10,322.2 | 9,784.9 | 9,558.5 | 8,868.4 |
| Guaranteed Index Return (GIR) and Challenger Index Plus Fund liabilities | 1,909.3 | 1,687.8 | 1,633.2 | 1,315.5 | 1,035.1 |
| **Total liabilities** | **14,738.2** | **13,867.5** | **12,879.8** | **12,602.4** | **11,559.1** |
| **Group net assets** | **3,469.5** | **2,888.1** | **2,780.5** | **2,680.9** | **2,696.2** |
| | | | | | |
| **Equity** | | | | | |
| Contributed equity | 2,071.0 | 1,554.5 | 1,560.1 | 1,546.7 | 1,576.8 |
| Reserves | (47.5) | (16.5) | (29.9) | (7.9) | (19.7) |
| Retained earnings | 1,446.0 | 1,350.1 | 1,250.3 | 1,142.1 | 1,139.1 |
| **Total equity** | **3,469.5** | **2,888.1** | **2,780.5** | **2,680.9** | **2,696.2** |

# Change in Group net assets

| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| **Opening net assets** | **2,888.1** | **2,780.5** | **2,680.9** | **2,696.2** | **2,543.2** |
| Statutory net profit after tax | 195.4 | 196.1 | 201.5 | 93.4 | 234.3 |
| Dividends paid | (99.5) | (96.3) | (93.3) | (90.4) | (87.5) |
| New share issue | 503.3 | 3.9 | 4.1 | 4.9 | 6.3 |
| Reserve movements | (31.0) | 13.4 | (22.0) | 11.8 | (43.4) |
| CPP Trust movements | 13.2 | (9.5) | 9.3 | (35.0) | 43.3 |
| **Closing net assets** | **3,469.5** | **2,888.1** | **2,780.5** | **2,680.9** | **2,696.2** |

1 Excludes consolidation of Special Purpose Vehicles (SPV's) and non-controlling interests.
2 Group/Life eliminations represent the fair value of the SPV residual income notes (i.e. NIM) held by Challenger Life Company Ltd.

# Issued share capital

| **Number of shares (m)** | **1H18** | **2H17** | **1H17** | **2H16** | **1H16** |
|---|---|---|---|---|---|
| Basic share count | 603.3 | 561.9 | 562.3 | 558.8 | 562.2 |
| CPP[1] treasury shares | 7.3 | 10.1 | 9.4 | 12.4 | 8.4 |
| **Total issued shares** | **610.6** | **572.0** | **571.7** | **571.2** | **570.6** |
| **Movement in basic share count** | | | | | |
| Opening | 561.9 | 562.3 | 558.8 | 562.2 | 553.4 |
| CPP deferred share purchase | (2.0) | (0.8) | (2.0) | (4.0) | – |
| Net treasury shares (acquired)/released | 4.8 | 0.1 | 5.0 | – | 7.9 |
| New share issues | 38.6 | 0.3 | 0.5 | 0.6 | 0.9 |
| Closing | 603.3 | 561.9 | 562.3 | 558.8 | 562.2 |
| **Movement in CPP 'treasury' shares** | | | | | |
| Opening | 10.1 | 9.4 | 12.4 | 8.4 | 16.3 |
| Shares vested to participants | (5.6) | (0.1) | (6.0) | (0.5) | (9.0) |
| CPP deferred share purchase | 2.0 | 0.8 | 2.0 | 4.0 | – |
| Shares bought into CPP Trust | 0.8 | – | 1.0 | 0.5 | 1.1 |
| Closing | 7.3 | 10.1 | 9.4 | 12.4 | 8.4 |

| **Weighted average number of shares (m)** | **1H18** | **2H17** | **1H17** | **2H16** | **1H16** |
|---|---|---|---|---|---|
| **Basic EPS shares** | | | | | |
| Total issued shares | 599.4 | 571.9 | 571.4 | 570.9 | 570.1 |
| Less CPP 'treasury' shares | (8.3) | (9.8) | (9.1) | (9.7) | (11.0) |
| Shares for basic EPS calculation | 591.1 | 562.1 | 562.3 | 561.2 | 559.1 |
| **Diluted EPS shares** | | | | | |
| Shares for basic EPS calculation | 591.1 | 562.1 | 562.3 | 561.2 | 559.1 |
| Add dilutive impact of unvested equity awards | 11.9 | 14.1 | 14.7 | 15.7 | 17.7 |
| Add dilutive impact of capital notes | 57.8 | 43.2 | 31.8 | 39.1 | 41.6 |
| Add dilutive impact of subordinated notes | 5.9 | – | – | – | – |
| Shares for dilutive EPS calculation | 666.7 | 619.4 | 608.8 | 616.0 | 618.4 |

| **Summary of Share Rights (m)** | **1H18** | **2H17** | **1H17** | **2H16** | **1H16** |
|---|---|---|---|---|---|
| **Hurdled Performance Share Rights** | | | | | |
| Opening | 10.2 | 10.4 | 12.5 | 13.0 | 17.3 |
| New grants | 2.0 | – | 2.5 | – | 3.4 |
| Vesting/forfeiture | (4.0) | (0.2) | (4.6) | (0.5) | (7.7) |
| Closing | 8.2 | 10.2 | 10.4 | 12.5 | 13.0 |
| **Deferred Performance Share Rights** | | | | | |
| Opening | 3.7 | 3.7 | 3.8 | 3.8 | 3.5 |
| New grants | 1.3 | – | 1.6 | – | 2.3 |
| Vesting/forfeiture | (2.1) | – | (1.7) | – | (2.0) |
| Closing | 2.9 | 3.7 | 3.7 | 3.8 | 3.8 |

1 The Challenger Performance Plan (CPP) Trust.

# Issued share capital

## Issued share capital and diluted share count

The number of Challenger Limited shares listed on the Australian Securities Exchange (ASX) at 31 December 2017 was 611m shares, and increased by 39m in 1H18 as a result of:

- 38.3m new shares issued following the equity placement to MS&AD in August 2017 (refer below for more detail); and
- 0.3m new shares issued under Challenger's Dividend Reinvestment Plan (DRP) in September 2017.

In order to broaden Challenger's relationship with MS&AD (refer to page 23 for more details), and to fund future growth, Challenger completed a $500m equity placement to MS&AD in August 2017. Challenger issued 38.3m new ordinary shares to MS&AD at a price of $13.06 per share, which represented a 2% premium to the 30 business day volume weighted average share price adjusted for the FY17 final dividend.

The equity placement to MS&AD represented 6.3% of Challenger's issued capital with MS&AD subsequently increasing their holding to ~10% of issued capital via on market acquisitions.

The basic share count used to determine Challenger's normalised and statutory EPS is based on requirements set out in Australian Accounting Standards.

Under Australian Accounting Standards:

- the basic share count is reduced for treasury shares;
- the dilutive share count includes unvested equity awards made to employees under the Challenger Performance Plan; and
- the dilutive share count considers convertible instruments (e.g. Challenger Capital Notes, Challenger Capital Notes 2, and subordinated debt) as determined by a probability of vesting test (refer to page 14 for more detail on the accounting treatment).

## Treasury shares

The Challenger Performance Plan (CPP) Trust was established to purchase shares to satisfy Challenger's employee equity obligations arising from hurdled and non-hurdled equity awards issued under employee remuneration structures.

Shares are acquired by the CPP Trust to mitigate shareholder dilution and provide a mechanism to hedge the cash cost of acquiring shares in the future to satisfy vested equity awards.

The CPP Trust typically acquires physical shares on market or via forward share purchase agreements. The use of forward share purchase agreements was implemented to increase capital efficiency. Shares held by the CPP Trust and share forward purchase agreements are classified as treasury shares.

It is expected that should equity awards vest in the future, the CPP Trust will satisfy equity requirements via a combination of treasury shares and settlement of forward purchase agreements. As such, it is not currently anticipated that new Challenger shares will be issued to meet future vesting obligations of equity awards.

## Weighted average number of shares

The weighted average number of shares to determine both the normalised and statutory basic EPS increased by 29m shares to 591m shares. The increase reflects the time weighted impact of the 38.3m shares issued to MS&AD on 23 August 2017 and 0.3m of new shares issued on 27 September 2017 to support Challenger's DRP, offset by a reduction in treasury shares of 2.8m shares.

The weighted average number of shares used to determine both the normalised and statutory diluted EPS increased by 47m shares in 1H18 to 667m shares. The increase reflects the higher weighted average basic share count (up 29m), the dilutive impact of capital notes and subordinated debt (refer to page 14 for more detail), which increased the dilutive share count by 18m shares.

# Unvested equity awards

## Hurdled Performance Share Rights (HPSRs)

Challenger's approach to executive remuneration includes providing Long-Term Incentive (LTI) awards to ensure alignment between key employees and shareholders.

LTI awards are delivered as HPSRs, which vest over a period of up to five years with vesting subject to meeting total shareholder return performance hurdles and continued employment.

## Deferred Performance Share Rights (DPSRs)

A portion of Short-Term Incentive (STI) awards are deferred and vest over a period of up to three years. Deferred STI is delivered as DPSRs with vesting subject to continued employment.

# Capital Notes

Challenger Life is growing strongly and over the past four years Challenger Limited has issued two separate subordinated, unsecured convertible notes (Challenger Capital Notes and Challenger Capital Notes 2), with proceeds used to fund Challenger Life Company Limited (CLC) qualifying Additional Tier 1 regulatory capital.

## Challenger Capital Notes (ASX code 'CGFPA')

In October 2014, Challenger issued Challenger Capital Notes to the value of $345m, which are subordinated, unsecured convertible notes issued by Challenger Limited. Challenger Capital Notes pay a margin of 3.40% above the 90 day Bank Bill rate, with the total distribution cost reduced by available franking credits.

Challenger Capital Notes are convertible to ordinary shares at any time before May 2022 on the occurrence of certain events, and mandatorily convertible to ordinary shares thereafter, in both cases subject to meeting certain conditions.

However, Challenger retains the option to redeem or resell Challenger Capital Notes and has an outright option to redeem or resell on 25 May 2020 (both subject to certain conditions being met). If Challenger exercises its option to redeem or resell, there will be no conversion of Challenger Capital Notes to Challenger ordinary shares and no subsequent shareholder dilution.

## Challenger Capital Notes 2 (ASX code 'CGFPB')

In April 2017 Challenger issued Challenger Capital Notes 2, to the value of $460m, which are subordinated, unsecured convertible notes issued by Challenger Limited. Challenger Capital Notes 2 pay a margin of 4.40% above the 90 day Bank Bill rate with the total distribution cost reduced by available franking credits.

Challenger Capital Notes 2 are convertible to ordinary shares at any time before May 2025 on the occurrence of certain events, and mandatorily convertible to ordinary shares thereafter, in both cases subject to meeting certain conditions.

However, Challenger retains the option to redeem or resell Challenger Capital Notes 2 and has an outright option to redeem or resell on 22 May 2023 (both subject to certain conditions being met). If Challenger exercises its option to redeem or resell, there will be no conversion of Challenger Capital Notes 2 to Challenger ordinary shares and no subsequent shareholder dilution.

# Subordinated debt

In November 2017, CLC issued $400m of Tier 2 subordinated notes. The subordinated notes qualify as Tier 2 regulatory capital under APRA's prudential standards and are floating rate notes, paying interest at a margin of 2.10% above the 3-month bank bill swap rate.

The subordinated notes mature in November 2042 with CLC having the option to redeem the notes in November 2022, subject to APRA approval.

The subordinated notes qualify 100% as Tier 2 regulatory capital until November 2038.

Proceeds from the subordinated notes issuance were used to repay CLC's existing Tier 2 subordinated debt instrument that had a call date in November 2017.

The replacement of the subordinated debt is not expected to have a material impact on Life's interest expense, which is included in cash operating earnings.

The subordinated notes include a holder conversion option which allows the note holder to convert the notes into Challenger ordinary shares in November 2024 if CLC has not already called the subordinated notes in November 2022.

If CLC exercises its options to redeem, there will be no conversion of subordinated debt to Challenger ordinary shares and no subsequent dilution.

# Accounting treatment of Capital Notes and Subordinated debt

Challenger Capital Notes, Challenger Capital Notes 2 and subordinated debt are an effective source of funding for Challenger.

Under Australian Accounting Standards, convertible debt is considered dilutive whenever the interest per ordinary share is less than the basic earnings per share. As such, a test is required to be undertaken each reporting period to determine if they are included in the dilutive share count.

Under Australian Accounting Standards, Challenger Capital Notes, Challenger Capital Notes 2 and subordinated debt have been considered to be dilutive at 31 December 2017 and have been included in Challenger's 1H18 dilutive share count. The 1H18 dilutive share count includes 6m shares in respect of the subordinated debt issued during 1H18 (issued 24 November 2017), being the time weighted impact of the subordinated notes.

If Challenger exercises its option to redeem, any of Challenger Capital Notes, Challenger Capital Notes 2 or the subordinated notes, there will be no conversion to Challenger ordinary shares and no subsequent shareholder dilution.

# Consolidated operating cash flow

| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| Receipts from customers | 336.5 | 334.0 | 339.0 | 317.2 | 281.2 |
| Dividends received | 53.8 | 30.5 | 36.0 | 24.2 | 32.2 |
| Interest received | 385.6 | 347.2 | 326.5 | 294.3 | 344.8 |
| Interest paid | (275.0) | (293.6) | (233.5) | (221.0) | (223.8) |
| Payments to suppliers and employees | (294.7) | (246.6) | (261.5) | (231.6) | (256.5) |
| Income tax paid | (152.4) | (40.1) | (38.0) | (33.4) | (30.5) |
| **Underlying operating cash flow** | **53.8** | **131.4** | **168.5** | **149.7** | **147.4** |
| Adjust for: | | | | | |
| Net annuity policy capital receipts | 758.2 | 451.5 | 448.9 | 469.9 | 270.5 |
| Net other Life capital receipts/(payments) | 189.6 | 67.5 | 345.0 | 230.1 | 78.9 |
| Other[1] | (34.9) | 6.9 | (22.5) | (34.9) | (29.2) |
| **Operating cash flow per financial report** | **966.7** | **657.3** | **939.9** | **814.8** | **467.6** |

Underlying operating cash flow excludes cash flows that are capital in nature such as annuity sales and annuity capital payments.

1H18 underlying operating cash flow was $54m, down $115m on 1H17. The reduction in underlying operating cash flow reflects an increase in income tax paid, which increased by $114m on 1H17. 1H18 cash income tax paid includes payment of the FY17 tax liabilities and increased Pay As You Go instalments for FY18.

## Net annuity policy capital receipts

1H18 net annuity policy capital receipts were $758m and comprise:

- Annuity sales of $2,289m; less
- Annuity capital payments of $1,531m.

Annuity capital payments are returns of capital to annuitants and exclude interest payments.

1H18 annuity net book growth was 7.3% (1H17 4.7%) and can be calculated as annuity net flows ($758m) divided by opening period Life annuity book ($10,322m – refer to page 17).

## Net other Life capital receipts

1H18 net other Life capital receipts in 1H18 were $190m and comprise:

- Other Life sales of $1,035m; less
- Other Life capital payments of $845m.

1H18 Other Life sales include existing Guaranteed Index Return (GIR) client mandate rollovers of ~$0.8bn and sales of the new Challenger Index Plus Fund of ~$0.2bn.

Challenger Index Plus Fund is a pooled version of GIR with liquidity and backed by high grade liquid fixed income. Challenger Index Plus Fund was launched in the second quarter of FY17.

1H18 total Life book growth was 7.9% (1H17 7.8%) and can be calculated as total net flows ($948m) divided by the sum of the opening period liabilities of $12,010m (Life annuity book, GIR and Challenger Index Plus Fund – refer to page 17).

1 Other includes net SPV operating cash flow adjustments for differences between statutory operating cash flow and normalised cash operating earnings

# Life financial results

| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| Investment yield – policyholders' funds | 435.4 | 408.5 | 405.0 | 385.1 | 382.4 |
| Interest expense | (234.7) | (216.4) | (210.3) | (203.5) | (206.9) |
| Distribution expense | (11.7) | (11.3) | (16.5) | (14.3) | (10.2) |
| Other income[1] | 10.8 | 11.9 | 24.5 | 12.8 | 11.6 |
| **Product cash margin** | **199.8** | **192.7** | **202.7** | **180.1** | **176.9** |
| Investment yield – shareholders' funds | 76.6 | 68.4 | 62.6 | 67.3 | 67.6 |
| **Cash earnings** | **276.4** | **261.1** | **265.3** | **247.4** | **244.5** |
| Normalised capital growth | 59.7 | 53.9 | 51.1 | 52.1 | 48.4 |
| **Normalised Cash Operating Earnings (COE)** | **336.1** | **315.0** | **316.4** | **299.5** | **292.9** |
| Personnel expenses | (33.8) | (31.7) | (30.1) | (29.8) | (26.9) |
| Other expenses | (19.3) | (19.1) | (19.3) | (18.8) | (17.1) |
| **Total expenses** | **(53.1)** | **(50.8)** | **(49.4)** | **(48.6)** | **(44.0)** |
| **Normalised EBIT** | **283.0** | **264.2** | **267.0** | **250.9** | **248.9** |
| Investment experience | (21.9) | 12.9 | 8.5 | (111.4) | 43.0 |
| **Net profit after investment experience before tax** | **261.1** | **277.1** | **275.5** | **139.5** | **291.9** |
| **Reconciliation of investment experience to capital growth** | | | | | |
| Investment experience | (21.9) | 12.9 | 8.5 | (111.4) | 43.0 |
| Normalised capital growth | 59.7 | 53.9 | 51.1 | 52.1 | 48.4 |
| **Capital growth** | **37.8** | **66.8** | **59.6** | **(59.3)** | **91.4** |
| **Performance analysis** | | | | | |
| Cost to income ratio[2] | 15.8% | 16.1% | 15.6% | 16.2% | 15.0% |
| Net assets – average[3] | 2,959 | 2,586 | 2,468 | 2,487 | 2,441 |
| Normalised RoE (pre-tax) | 19.0% | 20.6% | 21.5% | 20.3% | 20.3% |

1 Other income includes Accurium revenue and Life Risk revenue (premiums net of claims).
2 Cost to income ratio calculated as total expenses divided by Normalised Cash Operating Earnings.
3 Net assets – average calculated on a monthly basis.

# Life financial results

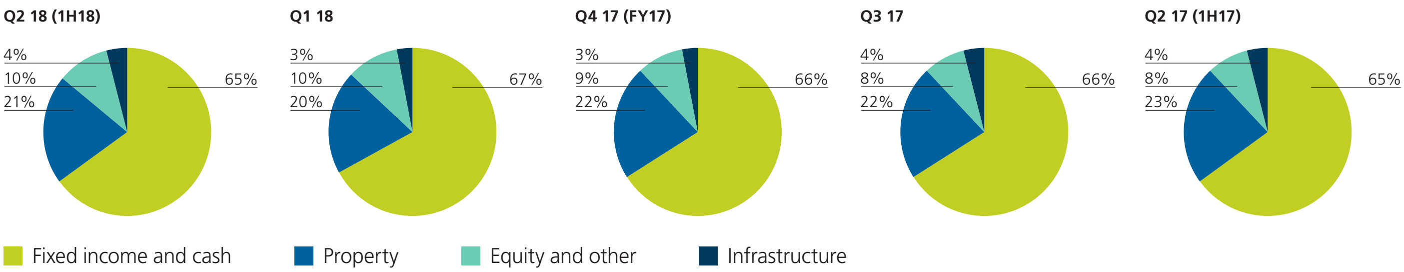
| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| **Sales** | | | | | |
| Fixed Term sales | 1,867.2 | 1,382.4 | 1,641.9 | 1,357.4 | 1,412.4 |
| Lifetime sales | 422.3 | 432.7 | 554.2 | 352.7 | 228.7 |
| **Life annuity sales** | **2,289.5** | **1,815.1** | **2,196.1** | **1,710.1** | **1,641.1** |
| Maturities and repayments | (1,531.3) | (1,363.6) | (1,747.2) | (1,240.2) | (1,370.6) |
| **Life annuity flows** | **758.2** | **451.5** | **448.9** | **469.9** | **270.5** |
| Life annuity book | 11,115.8 | 10,322.2 | 9,784.9 | 9,558.5 | 8,868.4 |
| **Annuity book growth[1]** | **7.3%** | **4.7%** | **4.7%** | **5.4%** | **3.1%** |
| | | | | | |
| Other Life sales | 1,034.5 | 378.9 | 562.3 | 588.8 | 409.7 |
| Other maturities and repayments | (844.8) | (360.9) | (167.8) | (337.5) | (333.1) |
| **Other Life flows** | **189.7** | **18.0** | **394.5** | **251.3** | **76.6** |
| Guaranteed Index Return (GIR) and Challenger Index Plus Fund liabilities | 1,909.3 | 1,687.8 | 1,633.2 | 1,315.5 | 1,035.1 |
| **Other Life net book growth[1]** | **11.2%** | **1.4%** | **30.0%** | **26.6%** | **8.1%** |
| | | | | | |
| Total Life sales | 3,324.0 | 2,194.0 | 2,758.4 | 2,298.9 | 2,050.8 |
| Total maturities and repayments | (2,376.1) | (1,724.5) | (1,915.0) | (1,577.7) | (1,703.7) |
| **Total Life net flows** | **947.9** | **469.5** | **843.4** | **721.2** | **347.1** |
| Life annuity book, GIR and Challenger Index Plus Fund liabilities | 13,025.1 | 12,010.0 | 11,418.1 | 10,874.0 | 9,903.5 |
| **Total Life book growth[1]** | **7.9%** | **4.3%** | **7.8%** | **7.5%** | **3.6%** |
| | | | | | |
| **Assets** | | | | | |
| **Closing investment assets** | **17,040** | **15,677** | **14,607** | **14,112** | **13,147** |
| Fixed income and cash[2] | 10,984 | 10,028 | 9,434 | 8,537 | 8,409 |
| Property | 3,388 | 3,350 | 3,205 | 3,220 | 3,120 |
| Equity and other investments | 1,532 | 1,262 | 1,110 | 1,059 | 928 |
| Infrastructure | 566 | 510 | 538 | 553 | 545 |
| **Average investment assets[3]** | **16,470** | **15,150** | **14,287** | **13,369** | **13,002** |
| | | | | | |
| **Liabilities** | | | | | |
| **Closing liabilities** | **14,235** | **13,209** | **12,148** | **11,796** | **10,825** |
| Average liabilities – annuities, GIR and Challenger Index Plus Fund | 12,568 | 11,802 | 11,133 | 10,166 | 9,786 |
| Average liabilities – capital notes | 805 | 542 | 345 | 345 | 345 |
| Average liabilities – sub debt | 401 | 392 | 556 | 574 | 584 |
| **Average liabilities[3]** | **13,774** | **12,736** | **12,034** | **11,085** | **10,715** |
| | | | | | |
| **Margins[4]** | | | | | |
| Investment yield – policyholders' funds | 5.25% | 5.44% | 5.62% | 5.80% | 5.84% |
| Interest expense | (2.83%) | (2.88%) | (2.92%) | (3.06%) | (3.16%) |
| Distribution expense | (0.14%) | (0.16%) | (0.23%) | (0.22%) | (0.16%) |
| Other income | 0.13% | 0.16% | 0.34% | 0.19% | 0.18% |
| **Product cash margin** | **2.41%** | **2.56%** | **2.81%** | **2.71%** | **2.70%** |
| Investment yield – shareholders' funds | 0.92% | 0.92% | 0.87% | 1.01% | 1.03% |
| **Cash earnings** | **3.33%** | **3.48%** | **3.68%** | **3.72%** | **3.73%** |
| Normalised capital growth | 0.72% | 0.71% | 0.71% | 0.79% | 0.74% |
| **Normalised Cash Operating Earnings (COE)** | **4.05%** | **4.19%** | **4.39%** | **4.51%** | **4.47%** |

1 Total Life book growth represents life annuity net flows and other life net flows over the period divided by the opening Life annuity book, Guaranteed Index Return and Challenger Index Plus Fund liabilities, (for example 1H18 book growth based on closing FY17 book).
2 Includes average NIM (1H18: $88m, 1H17: $98m, 1H16: $123m).
3 Average investment assets and average liabilities are calculated on a monthly basis.
4 Ratio of Normalised Cash Operating Earnings components divided by average investment assets.

# Life quarterly sales and investment assets

| $m | Q2 18 | Q1 18 | Q4 17 | Q3 17 | Q2 17 |
|---|---|---|---|---|---|
| **Life sales** | | | | | |
| Fixed Term sales | 980 | 887 | 720 | 662 | 905 |
| Lifetime (including Care Plus) sales | 212 | 210 | 215 | 218 | 258 |
| **Life annuity sales** | **1,192** | **1,097** | **935** | **880** | **1,163** |
| Maturities and repayments | (786) | (745) | (828) | (536) | (998) |
| **Life annuity flows** | **406** | **352** | **107** | **344** | **165** |
| **Annuity book growth[1]** | **3.9%** | **3.4%** | **1.1%** | **3.6%** | **1.7%** |
| | | | | | |
| Other Life sales | 562 | 473 | 1 | 378 | 512 |
| Other maturities and repayments | (543) | (302) | – | (361) | (168) |
| **Other Life flows** | **19** | **171** | **1** | **17** | **344** |
| **Other Life net book growth[1]** | **1.1%** | **10.1%** | **0.1%** | **1.3%** | **26.2%** |
| | | | | | |
| Total Life sales | 1,754 | 1,570 | 936 | 1,258 | 1,675 |
| Total maturities and repayments | (1,329) | (1,047) | (828) | (897) | (1,166) |
| **Total Life net flows** | **425** | **523** | **108** | **361** | **509** |
| **Total Life book growth[1]** | **3.5%** | **4.4%** | **1.0%** | **3.3%** | **4.7%** |
| | | | | | |
| **Life** | | | | | |
| Fixed income and cash[2] | 11,076 | 11,096 | 10,415 | 9,907 | 9,521 |
| Property[2] | 3,655 | 3,305 | 3,408 | 3,330 | 3,328 |
| Equity and other | 1,643 | 1,594 | 1,360 | 1,181 | 1,232 |
| Infrastructure[2] | 666 | 491 | 494 | 522 | 526 |
| **Total Life investment assets** | **17,040** | **16,486** | **15,677** | **14,940** | **14,607** |
| **Average Life investment assets[3]** | **16,884** | **16,059** | **15,559** | **14,689** | **14,354** |

### Life asset allocation




1 Book growth percentage represents net flows for the period divided by opening book value for the financial year.
2 Fixed income, property and infrastructure are reported net of debt.
3 Average Life investment assets calculated on a monthly basis.

# Life financial results

Challenger Life Company Ltd (CLC) is Australia's leading provider of annuities and guaranteed retirement income products.

Life's products appeal to investors seeking the security and certainty of guaranteed cash flows with protection against market, inflation and longevity risks.

Products are distributed via financial advisers, both independent and within the major hubs. Being an independent product manufacturer, CLC's products are included on all major hub Approved Product Lists (APLs).

CLC is diversifying its product range and distribution footprint by launching new products and making products more broadly available to financial advisers and their customers through leading investment and administration platforms.

CLC also has an annuity relationship with Mitsui Sumitomo Primary Life Insurance Company Limited (MS Primary), a leading provider of Australian dollar denominated annuities in Japan (refer to page 23 for more detail).

CLC has won the Association of Financial Advisers/Plan for Life 'Annuity Provider of the Year' for the past nine years. CLC also won the 2017 Retirement Product Innovation award for Liquid Lifetime in the Money Management/Lonsec Fund Manager of the Year awards, and the Longevity Product Best Fund award for the fourth year running in the Chant West 2017 Super Funds awards.

The Life business includes Accurium, one of Australia's leading providers of Self-Managed Superannuation Fund (SMSF) actuarial certificates (refer to page 20 for more detail).

CLC is diversifying its capital and earnings base by participating in wholesale reinsurance longevity and mortality transactions (Life Risk). Life is experienced in managing, pricing and reinsuring longevity and mortality risk. Refer to page 20 for additional details on Life Risk.

CLC is an APRA regulated entity and its financial strength is rated by Standard & Poor's with an 'A' rating and positive outlook. CLC is strongly capitalised with significant excess capital above APRA's minimum requirements. CLC's regulatory capital base, prescribed capital amount, and excess capital position are disclosed on page 37.

## Normalised EBIT and ROE

Life normalised EBIT was $283m in 1H18 and increased by $16m (6%) on 1H17. The increase in EBIT reflects a $20m increase in Normalised Cash Operating Earnings, partly offset by a $4m increase in expenses.

Life's 1H18 Life normalised ROE (pre-tax) was 19.0%, and decreased by 250 bps from 21.5% in 1H17. Life normalised ROE was impacted by higher capital levels following the MS&AD equity placement in August 2017 (refer to page 23 for more details).

## Normalised Cash Operating Earnings (COE) and COE margin

1H18 normalised COE was $336m and increased by $20m (6%) on 1H17. Excluding the ~$10m one-off Life Risk fee received in 1H17, normalised COE increased by 10%.

The increase in normalised COE is a result of higher average investment assets (up 15%), partially offset by a reduction in Life's COE margin. Life's COE margin was impacted by a change in product mix and lower other income.

Life's 1H18 COE margin was 4.05%, and was down 34 bps on 1H17 (4.39%). The change in COE margin was a result of:

- Lower product cash margin -40 bps. The product cash margin includes lower asset yields of 37 bps, partially offset by a 18 bps reduction in interest and distribution expenses, and lower other income of 21 bps.

  Excluding the reduction in other income (21 bps), the product cash margin fell by 19 bps and was impacted by a change in product mix and lower COE margin for GIR.

  Life's mix of business is changing, with the proportion of GIR (GIR mandates and Challenger Index Plus) and Japanese annuity business increasing to represent 21% of Life's 1H18 average liabilities, up from 12% in 1H17.

  GIR and Challenger Index Plus generate a lower COE margin, as they are fully backed by high grade fixed income investments. Challenger Index Plus is a callable version of GIR and is backed entirely by liquid high grade fixed income investments. Reflecting the liquid nature of these investments, Challenger Index Plus generates a lower margin than institutional GIR mandates.

  The Japanese annuity business is highly efficient. The COE margin includes Life's share of distribution costs with limited additional distribution and operational costs included in Life's expense base. As a result, the COE margin on the Japanese annuity business is lower than the margin for domestic annuity business.

  The proportion of higher margin domestic annuity business reduced to 79% of Life's 1H18 average liabilities, down from 88% in 1H17.

  Other income reduced by 21 bps due to lower Life Risk income, with 1H17 Life Risk income including a ~$10m (14 bps) one-off Life Risk fee as a result of a counterparty restructuring a transaction.

- Higher income on shareholder capital +5 bps. The income on shareholder capital increased following the equity placement to MS&AD in August 2017. Partially offsetting the higher capital was a lower return on shareholder capital due to lower interest rates, as capital is not hedged for interest rate movements. The average three month bank bill swap rate was 8 bps lower in 1H18 than 1H17.

- Normalised capital growth +1bps. Normalised capital growth increased due to a higher allocation to equities and infrastructure.

1H18 normalised COE includes other income of $11m, and includes Accurium revenue of $4m and Life Risk revenue of $7m. Life Risk revenue represents premiums net of expected claims on wholesale reinsurance longevity and mortality transactions (refer to page 20 for more detail).

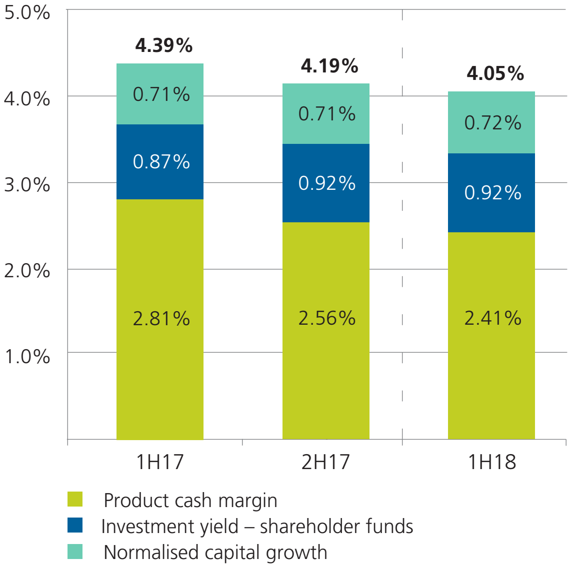
Life's 1H18 COE margin of 4.05% was 14 bps lower than 2H17. The change in COE margin was a result of:

- Lower product cash margin -15 bps. The product margin includes lower asset yields of 19 bps, partially offset by lower interest and distribution expenses of 7 bps, and lower other income of 3 bps.

  Excluding the reduction in other income (3 bps) the product margin reduced by 12 bps and was impacted by a change in product mix and lower GIR COE margin. The proportion of GIR (GIR mandates and Challenger Index Plus) and Japanese annuity business increased to 21% of average liabilities in 1H18, from 17% in 2H17. Within GIR, the portion of Challenger Index Plus, which is lower margin than GIR institutional mandates also increased.

  As a result of the product mix changes, the proportion of higher margin domestic annuity business decreased to 79% of average liabilities in 1H18, down from 83% in 2H17.
- Higher normalised capital growth +1bps due to a higher allocation to equities and infrastructure.

**Life COE margin composition**




## Life Risk

Undertaking wholesale longevity and mortality transactions is a natural business extension for the Life business. Life is participating in established markets, has specialised expertise and is taking a disciplined approach to the wholesale Life Risk opportunity.

1H18 Life COE includes $7m of income from Life Risk transactions, representing premiums net of expected claims. Life Risk income was down from $20m in 1H17 as 1H17 included a one-off fee (~$10m) due to a counterparty restructuring a Life Risk transaction.

The present value of future profits arising from the Life Risk portfolio was $272m at 31 December 2017, up from $263m at 30 June 2017. The Life Risk portfolio has an average duration of 14 years.

## Accurium

Accurium is one of Australia's leading providers of Self-Managed Superannuation Fund (SMSF) actuarial certificates. An actuarial certificate is required by a SMSF when one (or more) members are in the retirement phase of superannuation and one (or more) are in the savings (accumulation) phase of superannuation.

Accurium's 1H18 revenue was $4m (1H17 $4m) and is disclosed as part of other income within Life's normalised cash operating earnings framework.

## Expenses

1H18 Life expenses were $53m, and increased by $4m (7%) on 1H17. Personnel expenses ($34m) increased by $4m (12%) in order to support Life's expanded distribution and product footprint. Other expenses ($19m) were unchanged on 1H17.

Life operates a highly efficient business with a market leading cost to income ratio. Life's 1H18 cost to income ratio was 15.8% and increased by 20 bps on 1H17 and was down 30 bps on 2H17.

# Investment experience overview

Challenger Life is required by Australian Accounting Standards to value investment assets and liabilities supporting the Life business at fair value. This gives rise to fluctuating valuation movements on investment assets and liabilities being recognised in the profit and loss. Challenger is generally a long-term holder of assets, due to them being held to match the term of life contract liabilities. As a result, Challenger takes a long-term view of the expected capital growth of the portfolio rather than focusing on short-term movements.

Investment experience represents the difference between actual investment gains/losses (both realised and unrealised) and expected gains/losses based on Challenger's long-term expected returns. Refer to page 48 for details on Challenger's assumed long-term expected returns by asset class.

Investment experience also includes any impact from changes in economic variables and assumptions, including changes in discount rates used to value Life's liabilities (refer to page 48 for more detail).

1H18 investment experience was a loss of $22m (pre-tax), comprising a $24m gain on Life's investment assets, offset by a $46m loss on Life's annuity liabilities.

| Asset class ($m) | Actual capital growth | Normalised capital growth | Investment experience |
|---|---|---|---|
| Fixed income | 52 | (19) | 71 |
| Property | 67 | 34 | 33 |
| Equity and other | (9) | 34 | (43) |
| Infrastructure | (26) | 11 | (37) |
| **Asset investment experience** | **84** | **60** | **24** |
| Annuity liability valuation experience | (46) | – | (46) |
| **Total investment experience** | **38** | **60** | **(22)** |

### Asset investment experience

The gain on Life's investment assets in 1H18 was $24m and comprised:

- gain on Life's fixed income portfolio (+$71m) – reflecting a ~25 bps contraction in credit spreads on Challenger's fixed income investments. As Challenger is generally a hold to maturity investor, any unrealised revaluations of Challenger's fixed income portfolio are expected to reverse over time. The credit default allowance recognised in the profit and loss in 1H18 was +$3m or +3 bps representing a recovery of a prior period defaults;
- property valuation gains (+$33m) – reflecting a 2% increase in Life's direct property portfolio for 1H18, which exceeded Life's 2% per annum normalised growth assumption for property. Property valuation gains in 1H18 were supported by the renewal of a number of long-term leases and tightening of cap rates in some market segments;
- losses on Life's equity portfolio (-$43m) – as a result of equities underperforming Challenger's normalised growth assumption of 4.5% per annum. Equities valuations were impacted by losses on insurance linked investments of $33m, largely offset by gains on listed and unlisted beta portfolios; and
- losses on infrastructure (-$37m) – as a result of infrastructure underperforming Challenger's normalised growth assumption of 4% per annum. Infrastructure valuations were impacted by the redevelopment of an offshore asset and the timing of distributions.

### Annuity valuation investment experience

Investment experience includes the impact of changes in macroeconomic variables on the valuation of Challenger Life's policy liabilities. Economic and actuarial assumption changes include changes to bond yields, expected inflation rates, expense assumptions, losses on new business (new business strain) and other factors.

1H18 investment experience on Life's annuity liabilities was a loss of $46m, and comprised:

- New business strain (loss of $37m). Net new business strain is a non-cash accounting adjustment that unwinds over the period of the contract (refer below for more detail);
- lower illiquidity premium used to value Life's annuity liabilities (loss of $41m). The illiquidity premium reduced as a result of a contraction in fixed income credit spreads partially offset by;
- other assumption changes (gain of $32m) include changes to inflation and expense factors as well as experience gains on surrenders and reinsurance.

### New business strain

In accordance with Australian Accounting Standards, Challenger Life values term annuities at fair value and lifetime annuities using a risk-free discount rate, both of which are based on the Australian Commonwealth Government bond curve plus an illiquidity premium.

Life tends to offer annuity rates which are higher than these rates. As a result, on writing new annuity business, a loss is recognised when issuing the annuity contract due to a lower discount rate used to value the liability.

New business strain is a non-cash item and subsequently unwinds over the period of the contract. The 1H18 new business strain was a loss of $37m (1H17 $35m).

### Illiquidity premium

In accordance with Prudential Standards and Australian Accounting Standards, Challenger Life values term annuities at fair value and lifetime annuities using a risk-free discount rate, both of which are based on the Australian Commonwealth Government bond curve plus an illiquidity premium.

Movements in credit spreads impact the fair value of assets as well as the illiquidity premium which forms part of the discount rate used to value policy liabilities.

The illiquidity premium used to value policy liabilities is calculated in accordance with AASB 1038 Life Insurance Contracts and AASB 139 Financial Instruments: Recognition and Measurement.

In 1H18 corporate bond spreads to Australian Commonwealth Government securities contracted by approximately 30 bps, which lowered the liability discount rate used to fair value annuity liabilities, and resulted in a higher annuity liability. As a result, 1H18 investment experience includes a loss of $41m due to a change in the illiquidity premium used to value liabilities.

## Sales and AUM

### Total Life sales

Total Life sales were $3.3bn, and increased by 21% on 1H17. Total Life sales comprised annuity sales of $2.3bn (up 4% on 1H17) and other Life sales of $1.0bn (up 84% on 1H17).

### Annuity sales

1H18 Life annuity sales were $2.3bn, and increased by 4% on 1H17. Term annuity sales were $1.9bn and increased by 14% on 1H17, and lifetime annuity sales were $422m and decreased by 24%.

Both term and lifetime annuity sales benefit from favourable demographic trends, including an ageing population and retirees taking a more conservative approach to retirement investing. These favourable demographic trends are being leveraged by Challenger's market leading retirement income brand, highly rated distribution team, thought leadership, research and product capability.

Challenger's annuity sales are also benefiting from new distribution relationships, allowing access to Challenger annuities via investment and administration platforms.

In FY16 Challenger annuities were made available on the Colonial First State platforms, which followed Challenger annuities being integrated with VicSuper account-based pensions to effectively create Australia's first MyRetirement product. During FY17 Challenger annuities were made available on the ClearView Wealth Solutions platform, to members of three profit-for-member funds (CareSuper, legalsuper, Local Government Super) and Suncorp commenced selling Suncorp branded annuities backed by Challenger. In September 2017, Challenger annuities were launched on AMP's investment and administration platforms and made available to AMP's retail and corporate superannuation customers. AMP operates Australia's largest retail adviser network.

Challenger is making its annuities available on the new innovative BT Panorama platform with the launch targeted for the June 2018 quarter.

These new platform and distribution initiatives are significantly broadening access to Challenger annuities and are making products more easily accessible by financial advisers and their clients.

Following the launch on the BT platform, approximately two thirds of Australian financial advisers will be able to access Challenger annuities via investment and administration platforms.

In October 2016, Challenger announced an annuity relationship with Mitsui Sumitomo Primary Life Insurance Company Limited (MS Primary), a leading provider of Australian dollar annuity and life insurance products in Japan (refer to page 23 for more information). The MS Primary annuity relationship has continued strongly, contributing 17% of Life's 1H18 annuity sales and is helping to diversify Challenger's distribution channels and product offering.

## Term annuity sales

1H18 term annuity sales were $1.9bn and increased by 14% on 1H17. 1H18 term annuity sales benefited from the new MS Primary annuity relationship, which is providing the opportunity to focus on long-term business (refer page 23 for more detail).

## Lifetime annuity sales

Lifetime annuity sales were $422m in 1H18 and comprised Liquid Lifetime sales of $274m and CarePlus sales of $148m.

Lifetime annuity sales were down 24% on 1H17 due to Liquid Lifetime sales being elevated in 1H17 ahead of changes to the Aged Pension taper rate, which came into effect on 1 January 2017.

1H18 Lifetime annuity sales ($422m) were broadly consistent with 2H17 ($433m) and have been in the range of $210m to $220m for the last four quarters.

CarePlus was launched in early FY16 and is a product designed specifically for the aged care market. CarePlus sales are growing strongly, and were $148m in 1H18, an increase of 64% on 1H17.

## Focus on long-term annuity sales

Challenger is focused on growing its long-term annuity business as it embeds significant value for Challenger shareholders. Approximately 36% of 1H18 sales were either lifetime annuities or MS Primary term annuities, up from 31% in 1H17. MS Primary annuities have a contracted fixed term of up to 20 years.

Long-term annuity business is attractive for Challenger as it:

- lengthens the annuity book tenor;
- improves the maturity outlook;
- assists future book growth;
- enhances overall book quality; and
- allows investing in longer term less liquid assets generating an illiquidity premium.

## New business tenor

As a result of a larger proportion of sales being lifetime annuities and longer dated MS Primary annuity sales, new business tenor increased to 9.3 years in 1H18, up from 8.7 years in 1H17 and 5.6 years in 1H16. New business tenor represents the average product maturity of new business sales. These products may amortise over the period.

## Other Life sales

Other Life sales represent Challenger's institutional Guaranteed Index Return (GIR) product and the recently launched Challenger Index Plus Fund, which is a liquid GIR product backed by high grade liquid fixed income. Both the GIR and Challenger Index Plus products are targeted at Australian superannuation funds.

1H18 other Life sales were $1.0bn and included existing GIR client mandate rollovers ($0.8bn), and sales of the new Challenger Index Plus Fund ($0.2bn).

## Life book liability maturity profile

Long-term annuity business is attractive for Challenger as it improves the maturity outlook and enhances net book growth. In 1H18 the benefit of focusing on long-term annuities is starting to be realised with $1.5bn of annuity maturities, which was down $0.2bn on 1H17.

The annuity maturity rate, which represents annuity maturities and repayments (excluding interest payments) divided by the opening period annuity liability, was 15% in 1H18 and was down from 18% in 1H17. The annuity maturity rate is expected to step down further in 2H18 to approximately 10%. As a result of the lower maturity rate in 2H18, maturities are expected to be $0.5bn lower than in 1H18.

## Net book growth

## Life annuity book growth

1H18 Life annuity net flows (i.e. annuity sales less capital repayments) were $758m, and increased by 69% on 1H17 ($449m). Based on the opening FY18 Life annuity book liability ($10,322m), the 1H18 annuity book growth was 7.3% (1H17 4.7%).

## Other Life book growth

1H18 other Life net flows (i.e. other life sales less capital repayments) were $190m, which was down 52% on 1H17 ($394m).

## Total Life book growth

1H18 total Life net flows across both annuities and other products (Guaranteed Index Return and Challenger Index Plus Fund) were $948m, including annuity net flows of $758m and other net flows of $190m. 1H18 total net flows of $948m were 12% higher than in 1H17 ($843m).

Based on the opening FY18 annuity liability ($10,322m) and GIR liability ($1,688m), 1H18 total Life book growth was 7.9%, up from 7.8% in 1H17.

## Average AUM

Life's 1H18 average investment assets were $16.5bn, and increased by 9% ($1.3bn) in 1H18. The increase in average investment assets is primarily due to annuity net flows ($0.8bn), net flows on other products ($0.2bn), proceeds from the equity placement to MS&AD ($0.5bn), Life earnings (net of dividends to Group) and other movements.

## Mitsui Sumitomo Primary Life Insurance Company Limited (MS Primary) annuity relationship

Consistent with Challenger's strategy to diversify its range of products and expand its distribution relationships, in November 2016 Challenger commenced a new annuity relationship with Mitsui Sumitomo Primary Life Insurance Company Limited (MS Primary).

MS Primary provides annuity and life insurance products to Japanese customers and is part of MS&AD Insurance Group Holdings Inc., a Nikkei 225 company.

Japan has one of the world's most rapidly ageing populations who are looking for income from longer dated products due to the low Japanese interest rate environment. This has driven a significant increase in demand for foreign currency annuities, including Australian dollar denominated annuities.

In late August 2016, MS Primary launched an innovative Australian dollar product with a 20-year fixed rate in Japan. The product is being distributed through the Japanese bancassurance channel. Under the terms of the new product, the customer can choose an annuity payment period of 5, 10 or 20 years, with a benefit payable upon death.

In relation to reinsuring this product, from 1 November 2016 Challenger commenced issuing Australian dollar fixed rate annuities with a 20-year term in order to support the reinsurance agreement with MS Primary. Challenger provides a guaranteed interest rate and assumes the investment risk on a portion of each new policy issued by MS Primary.

The MS Primary annuity portfolio is invested in the key asset classes that Challenger currently invests in and is accounted for under Australian Generally Accepted Accounting Principles and Challenger's normalised profit framework, consistent with Challenger's Life business.

As the product is an Australian dollar product, Challenger assumes no foreign currency risk and the product is confined to a maximum fixed 20 year period.

MS Primary is responsible for marketing and providing the product in Japan, including making payments to policyholders. Challenger guarantees a rate to MS Primary, which effectively includes Challenger's contribution toward marketing, distribution and administration costs in Japan. As such, for this product, Challenger incurs limited distribution and operational costs as part of its direct expense base.

The annuity relationship with MS Primary generated 17% of Challenger's 1H18 annuity sales.

Under the reinsurance agreement, the guaranteed interest rate on new business can be revised and has mechanisms to regulate volumes between MS Primary and Challenger. The agreement also includes usual termination rights for both parties, including material breach, failure to make payments and events that may be triggered by changes in MS Primary's regulatory environment.

MS Primary and Challenger are jointly developing a new lifetime annuity product specifically for the Japanese annuities market, and intends to commence reinsuring the new product in Q418.

## Broadening the relationship with MS&AD

MS&AD's subsidiary, MS Primary is a key Challenger annuity partner. Challenger is broadening its relationship with MS&AD and both parties have identified new potential growth opportunities.

In FY17 Challenger opened a Tokyo office to support future growth across both Life and Funds Management.

In recognition of the strategic importance of the MS&AD relationship, and to facilitate Challenger's future growth, a $500m equity placement to MS&AD was completed on 23 August 2017.

The equity placement represented 6.3% of Challenger's issued capital and MS&AD have subsequently increased their shareholding in Challenger to ~10% of issued capital via on market acquisitions.

MS&AD's equity investment in Challenger underpins the strength of the relationship and is supportive of Challenger's ongoing growth.

# Retirement income regulatory reforms update

The Australian Government is undertaking a range of reforms to enhance the retirement phase of superannuation. These reforms include:

- Defining the objective of superannuation;
- Removing impediments to longevity product development through the Retirement Income Streams Review; and
- Creating a framework for pre-selecting retirement income products at retirement, known as MyRetirement or Comprehensive Income Products for Retirement.

## Objective of superannuation

The Government has adopted the Financial System Inquiry's (FSI[1]) recommendation that the objective of superannuation should be to provide income in retirement to substitute or supplement the Age Pension. Making clear the objective of superannuation provides the framework for future Government policy, and also provides guidance to the superannuation industry and retirees.

## New retirement income rules – Retirement Income Streams Review

As part of the Federal Budget in May 2016, the Government announced a new superannuation framework for retirement income products. The new product rules remove the impediments to longevity products, including Deferred Lifetime Annuities and group self-annuitisation products, and are expected to provide the building blocks for superannuation funds to develop MyRetirement products (or CIPRs).

In June 2017, the Government finalised the new retirement income product rules by issuing final regulations. In September 2017 Challenger launched a Deferred Lifetime Annuity (DLA) product, and is awaiting finalisation of the proposed means testing rules for the treatment of lifetime retirement income streams by the Department of Social Services.

The Department of Social Services has released proposed means testing rules for the treatment of lifetime retirement income streams, including lifetime annuities and new products, such as deferred lifetime annuities. The consultation closes in February 2018.

## MyRetirement or Comprehensive Income Products for Retirement (CIPR)

The FSI recommended trustees should pre-select for members a Comprehensive Income Product for Retirement (CIPR) to enable a seamless transition to retirement and deliver on the superannuation objective to provide retirement income.

The Government is proposing to rename CIPRs 'MyRetirement' products.

Over the past 18 months the Government has undertaken consultation with industry around provision of income streams in the retirement phase of superannuation. Further steps on these MyRetirement reforms are expected in 2H18.

1 The Australian Government commissioned the Financial System inquiry (FSI) to provide a 'blueprint' for Australia's financial system over the next decade. The FSI final report was released in December 2014.

# Life balance sheet

| $m | 1H18 | FY17 | 1H17 | FY16 | 1H16 |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| **Life investment assets** | | | | | |
| Cash and equivalents | 950.1 | 1,430.1 | 1,172.7 | 1,990.6 | 1,631.9 |
| Asset backed securities | 4,542.2 | 4,416.7 | 4,362.8 | 4,138.1 | 4,044.5 |
| Corporate credit | 5,584.2 | 4,568.2 | 3,985.4 | 3,186.8 | 2,811.2 |
| **Fixed income and cash (net)** | **11,076.5** | **10,415.0** | **9,520.9** | **9,315.5** | **8,487.6** |
| Australian – Office | 1,855.6 | 1,670.6 | 1,563.1 | 1,498.4 | 1,385.2 |
| Australian – Retail | 962.5 | 941.1 | 921.3 | 962.0 | 986.1 |
| Australian – Industrial | 152.0 | 170.1 | 195.6 | 188.3 | 98.6 |
| Japanese | 234.0 | 229.3 | 226.9 | 242.4 | 203.6 |
| REITs and other | 450.5 | 396.7 | 421.4 | 258.9 | 389.7 |
| **Property (net)** | **3,654.6** | **3,407.8** | **3,328.3** | **3,150.0** | **3,063.2** |
| Equity and other investments | 1,642.7 | 1,360.1 | 1,231.6 | 1,079.0 | 1,060.0 |
| Infrastructure (net) | 666.3 | 494.4 | 526.4 | 567.2 | 536.4 |
| **Life investment assets** | **17,040.1** | **15,677.3** | **14,607.2** | **14,111.7** | **13,147.2** |
| Other assets (including intangibles) | 644.1 | 479.7 | 389.4 | 516.0 | 460.1 |
| **Total assets** | **17,684.2** | **16,157.0** | **14,996.6** | **14,627.7** | **13,607.3** |
| **Liabilities** | | | | | |
| Life annuity book | 11,115.8 | 10,322.2 | 9,784.9 | 9,558.5 | 8,868.4 |
| Guaranteed Index Return (GIR) and Challenger Index Plus liabilities | 1,909.3 | 1,687.8 | 1,633.2 | 1,315.5 | 1,035.1 |
| Subordinated debt | 405.3 | 393.6 | 384.8 | 576.7 | 576.5 |
| Challenger Capital Notes | 805.0 | 805.0 | 345.0 | 345.0 | 345.0 |
| Other liabilities | 296.1 | 277.4 | 295.3 | 342.6 | 215.2 |
| **Total liabilities** | **14,531.5** | **13,486.0** | **12,443.2** | **12,138.3** | **11,040.2** |
| **Net assets** | **3,152.7** | **2,671.0** | **2,553.4** | **2,489.4** | **2,567.1** |

# Life investment portfolio overview

Life maintains a high quality investment portfolio in order to generate cash flows to meet future annuity obligations.

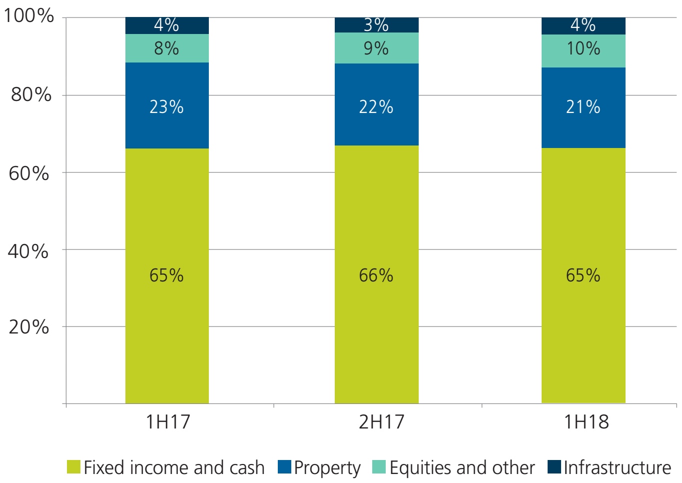
Life reviews its investment asset allocation based on the relative value of different asset classes, expected return on equity, and the tenor of annuity sales as Life maintains a cash flow matched portfolio. Accordingly, Life's investment asset allocation may vary from time to time.

Life's investment assets at 31 December 2017 comprised:

- Fixed income and cash 65%;
- Property 21%;
- Equities and other investments 10%; and
- Infrastructure 4%.

Detailed information on Life's investment assets is included on pages 27 to 35.

**Life investment portfolio overview chart**




## Fixed income portfolio overview

Life's fixed income and cash portfolio was $11.1bn (net of debt) at 31 December 2017 up from $10.4bn at 30 June 2017. The fixed income and cash portfolio represented 65% of Life's investment assets at 31 December 2017.

Challenger manages credit risk by maintaining a high-quality investment portfolio and applying a rigorous investment process. The fixed income portfolio is diversified across different industries, rating bands, asset classes and geographies.

Life's policyholder liabilities and cash flows are long-term in nature and contracted, providing the opportunity to invest in longer-dated and less liquid fixed income investments, allowing Life to earn an illiquidity premium on fixed income. The average fixed income illiquidity premium generated over the last five years is between 1% and 2%.

The fixed income portfolio comprises over 1,200 different securities with 77% of the fixed income portfolio investment grade (i.e. BBB or higher), up from 76% at 30 June 2017.

A total of 78% of the fixed income portfolio is externally rated (Standard & Poor's, Fitch or Moody's) and 22% based on internal ratings calibrated to Standard & Poor's or Moody's ratings framework.

The fixed income and cash portfolio is predominately Australian focused, with approximately 63% of the fixed income portfolio invested in Australian based securities.

Approximately 24% of Life's fixed income portfolio represents fixed income investments originated by Challenger. Direct fixed income origination includes senior secured loans, asset backed securities and commercial real estate lending. Life's direct origination capability has been in place for over ten years and provides opportunities to capture relative value including illiquidity premiums.

## Fixed income credit default experience

Challenger's normalised growth assumption for fixed income is negative 35 basis points, representing an allowance for credit defaults. In 1H18 the credit default experience was +3 basis points due to a net recovery of prior period defaults. Over the past five years the average credit default experience has been 12 basis points per annum.

Detailed disclosure of Life's fixed income portfolio is included on pages 27 to 30. The fixed income disclosures include the following tables.

1. Table 1 – fixed income portfolio overview;
2. Table 2 – fixed income portfolio by credit rating;
3. Table 3 – fixed income portfolio by rating type;
4. Table 4 – fixed income portfolio by industry sector; and
5. Table 5 – fixed income portfolio by geography and credit rating.

# Table 1: Fixed income portfolio overview

| 31 December 2017 | | $m | % portfolio | |
|---|---|---|---|---|
| **Liquids** | | 950 | 9% | Includes cash and equivalents and Government Bonds (net of repurchase agreements). |
| **Asset Backed Securities (ABS)** | RMBS | 2,278 | 21% | Residential mortgage backed securities (RMBS). RMBS expertise developed when Challenger was Australia's largest non-bank securitiser of RMBS (via Mortgage Management business sold in 2009). Also includes NIM notes. |
| | Other ABS | 1,042 | 9% | Financing secured against underlying assets. Asset security includes motor vehicle, equipment and consumer finance. |
| | Senior Secured Bank Loans | 497 | 4% | Senior debt secured by collateral and typically originated by Challenger. |
| | Aviation Finance | 236 | 2% | Secured commercial aircraft financing. |
| | CMBS | 490 | 5% | Commercial Mortgage Backed Securities (CMBS). |
| **Corporate Credit** | Banks & Financials | 1,239 | 11% | Corporate loans to banks, insurance companies and fund managers. |
| | Infrastructure | 1,496 | 14% | Long dated inflation linked bonds issued by Public Private Partnership projects and loans to infrastructure companies. |
| | Non-Financial Corporates | 1,779 | 16% | Traded commercial loans to industrials and retailers. |
| | Commercial Real Estate | 1,070 | 9% | Loans secured against commercial real estate assets and typically originated by Challenger. |
| **Total** | | **11,077** | **100%** | |

# Table 2: Fixed income portfolio by credit rating

| | Investment grade | | | | | | Non-investment grade | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **31 December 2017 ($m)** | **Liquids** | **AAA** | **AA** | **A** | **BBB** | **Total** | **BB** | **B or lower** | **Total** | **$m** |
| **Liquids** | | | | | | | | | | |
| Government Bonds[1] | 107 | – | – | – | – | **107** | – | – | – | **107** |
| Cash & equivalents | 843 | – | – | – | – | **843** | – | – | – | **843** |
| **Asset Backed Securities (ABS)** | | | | | | | | | | |
| RMBS | – | 763 | 487 | 532 | 291 | **2,073** | 108 | 97 | **205** | **2,278** |
| Other ABS | – | 120 | 87 | 138 | 165 | **510** | 378 | 154 | **532** | **1,042** |
| Senior Secured Loans | – | 58 | 28 | 40 | 260 | **386** | 101 | 10 | **111** | **497** |
| Aviation Finance | – | – | – | 113 | 85 | **198** | 30 | 8 | **38** | **236** |
| CMBS | – | 42 | 46 | 60 | 121 | **269** | 194 | 27 | **221** | **490** |
| **Corporate credit** | | | | | | | | | | |
| Banks & Financials | – | – | 136 | 367 | 618 | **1,121** | 96 | 22 | **118** | **1,239** |
| Infrastructure | – | 5 | 101 | 381 | 736 | **1,223** | 173 | 100 | **273** | **1,496** |
| Non-Financial Corporates | – | 1 | 7 | 192 | 676 | **876** | 610 | 293 | **903** | **1,779** |
| Commercial Real Estate | – | 29 | 24 | 247 | 617 | **917** | 91 | 62 | **153** | **1,070** |
| **Total** | **950** | **1,018** | **916** | **2,070** | **3,569** | **8,523** | **1,781** | **773** | **2,554** | **11,077** |
| Fixed income portfolio % | 9% | 9% | 8% | 19% | 32% | **77%** | 16% | 7% | **23%** | **100%** |
| Average duration (years) | 0.0 | 1.7 | 3.1 | 4.1 | 3.5 | **3.3** | 3.4 | 3.2 | **3.3** | **3.3** |

| | Investment grade | | | | | | Non-investment grade | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **31 December 2017 (%)** | **Liquids** | **AAA** | **AA** | **A** | **BBB** | **Total** | **BB** | **B or lower** | **Total** | **%** |
| **Liquids** | | | | | | | | | | |
| Government Bonds[1] | 100% | – | – | – | – | **100%** | – | – | **–** | **100%** |
| Cash & equivalents | 100% | – | – | – | – | **100%** | – | – | **–** | **100%** |
| **Asset Backed Securities (ABS)** | | | | | | | | | | |
| RMBS | – | 33% | 21% | 23% | 14% | **91%** | 5% | 4% | **9%** | **100%** |
| Other ABS | – | 12% | 8% | 13% | 16% | **49%** | 36% | 15% | **51%** | **100%** |
| Senior Secured Loans | – | 12% | 6% | 8% | 52% | **78%** | 20% | 2% | **22%** | **100%** |
| Aviation Finance | – | – | – | 48% | 36% | **84%** | 13% | 3% | **16%** | **100%** |
| CMBS | – | 9% | 9% | 12% | 25% | **55%** | 40% | 5% | **45%** | **100%** |
| **Corporate credit** | | | | | | | | | | |
| Banks & Financials | – | – | 11% | 30% | 49% | **90%** | 8% | 2% | **10%** | **100%** |
| Infrastructure | – | – | 7% | 25% | 50% | **82%** | 12% | 6% | **18%** | **100%** |
| Non-Financial Corporates | – | – | – | 11% | 38% | **49%** | 34% | 17% | **51%** | **100%** |
| Commercial Real Estate | – | 3% | 2% | 23% | 58% | **86%** | 9% | 5% | **14%** | **100%** |
| **Total** | **9%** | **9%** | **8%** | **19%** | **32%** | **77%** | **16%** | **7%** | **23%** | **100%** |

1 Gross Government Bonds of $4,599m are shown net of $3,388m of Government Bonds that are held via repurchase agreements. Repurchase agreements are used to hedge movements in interest rates. Refer to page 36 for more details.

# Table 3: Fixed income portfolio by rating type

| 31 December 2017 ($m) | Investment grade Liquids | AAA | AA | A | BBB | Total | Non-investment grade BB | B or lower | Total | Total $m |
|---|---|---|---|---|---|---|---|---|---|---|
| **Liquids** | | | | | | | | | | |
| Externally rated | 950 | – | – | – | – | **950** | – | – | – | **950** |
| Internally rated | – | – | – | – | – | **–** | – | – | **–** | **–** |
| **Asset Backed Securities (ABS)** | | | | | | | | | | |
| Externally rated | – | 950 | 645 | 683 | 516 | **2,794** | 215 | 80 | **295** | **3,089** |
| Internally rated | – | 33 | 3 | 201 | 405 | **642** | 596 | 216 | **812** | **1,454** |
| **Corporate credit** | | | | | | | | | | |
| Externally rated | – | 35 | 268 | 1,186 | 2,256 | **3,745** | 548 | 317 | **865** | **4,610** |
| Internally rated | – | – | – | – | 392 | **392** | 422 | 160 | **582** | **974** |
| **Total** | **950** | **1,018** | **916** | **2,070** | **3,569** | **8,523** | **1,781** | **773** | **2,554** | **11,077** |
| Externally rated | 100% | 97% | 100% | 90% | 78% | **88%** | 43% | 51% | **45%** | **78%** |
| Internally rated | – | 3% | – | 10% | 22% | **12%** | 57% | 49% | **55%** | **22%** |

| 31 December 2017 (%) | Investment grade Liquids | AAA | AA | A | BBB | Total | Non-investment grade BB | B or lower | Total | Total % |
|---|---|---|---|---|---|---|---|---|---|---|
| **Liquids** | | | | | | | | | | |
| Externally rated | 100% | – | – | – | – | **100%** | – | – | **–** | **100%** |
| Internally rated | – | – | – | – | – | **–** | – | – | **–** | **–** |
| **Asset Backed Securities (ABS)** | | | | | | | | | | |
| Externally rated | – | 31% | 21% | 22% | 16% | **90%** | 7% | 3% | **10%** | **100%** |
| Internally rated | – | 2% | – | 14% | 28% | **44%** | 41% | 15% | **56%** | **100%** |
| **Corporate credit** | | | | | | | | | | |
| Externally rated | – | 1% | 6% | 26% | 48% | **81%** | 12% | 7% | **19%** | **100%** |
| Internally rated | – | – | – | – | 40% | **40%** | 43% | 17% | **60%** | **100%** |
| **Total** | **9%** | **9%** | **8%** | **19%** | **32%** | **77%** | **16%** | **7%** | **23%** | **100%** |

# Table 4: Fixed income portfolio by industry sector

| | Investment grade | | | | | | Non-investment grade | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **31 December 2017 ($m)** | **Liquids** | **AAA** | **AA** | **A** | **BBB** | **Total** | **BB** | **B or lower** | **Total** | **$m** |
| Industrials and Consumers | – | 205 | 186 | 449 | 1,201 | **2,041** | 1,062 | 471 | **1,533** | **3,574** |
| Residential Property | – | 766 | 452 | 566 | 236 | **2,020** | 100 | 126 | **226** | **2,246** |
| Banks, Financials & Insurance | 843 | 9 | 141 | 452 | 624 | **2,069** | 131 | 23 | **154** | **2,223** |
| Government | 107 | – | – | – | – | **107** | – | – | **–** | **107** |
| Commercial Property | – | 33 | 36 | 222 | 705 | **996** | 272 | 52 | **324** | **1,320** |
| Infrastructure & Utilities | – | 5 | 101 | 381 | 740 | **1,227** | 175 | 101 | **276** | **1,503** |
| Other | – | – | – | – | 63 | **63** | 41 | – | **41** | **104** |
| **Total** | **950** | **1,018** | **916** | **2,070** | **3,569** | **8,523** | **1,781** | **773** | **2,554** | **11,077** |

| | Investment grade | | | | | | Non-investment grade | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **31 December 2017 (%)** | **Liquids** | **AAA** | **AA** | **A** | **BBB** | **Total** | **BB** | **B or lower** | **Total** | **%** |
| Industrials and Consumers | – | 6% | 5% | 13% | 33% | **57%** | 30% | 13% | **43%** | **100%** |
| Residential Property | – | 34% | 20% | 25% | 11% | **90%** | 4% | 6% | **10%** | **100%** |
| Banks, Financials & Insurance | 38% | – | 6% | 20% | 29% | **93%** | 6% | 1% | **7%** | **100%** |
| Government | 100% | – | – | – | – | **100%** | – | – | **–** | **100%** |
| Commercial Property | – | 3% | 3% | 17% | 52% | **75%** | 21% | 4% | **25%** | **100%** |
| Infrastructure & Utilities | – | – | 7% | 25% | 50% | **82%** | 12% | 6% | **18%** | **100%** |
| Other | – | – | – | – | 61% | **61%** | 39% | – | **39%** | **100%** |
| **Total** | **9%** | **9%** | **8%** | **19%** | **32%** | **77%** | **16%** | **7%** | **23%** | **100%** |

# Table 5: Fixed income portfolio by geography and credit rating

| | Investment grade | | | | | | Non-investment grade | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **31 December 2017 ($m)** | **Liquids** | **AAA** | **AA** | **A** | **BBB** | **Total** | **BB** | **B or lower** | **Total** | **$m** |
| Australia | 469 | 884 | 618 | 1,163 | 2,197 | **5,331** | 1,209 | 459 | **1,668** | **6,999** |
| United States | 304 | 29 | 45 | 299 | 476 | **1,153** | 347 | 278 | **625** | **1,778** |
| Rest of World | 41 | 48 | 95 | 106 | 178 | **468** | 57 | 14 | **71** | **539** |
| United Kingdom | 70 | 41 | 41 | 206 | 258 | **616** | 25 | – | **25** | **641** |
| Europe | 59 | – | 69 | 209 | 417 | **754** | 77 | 4 | **81** | **835** |
| New Zealand | 7 | 16 | 48 | 87 | 43 | **201** | 66 | 18 | **84** | **285** |
| **Total** | **950** | **1,018** | **916** | **2,070** | **3,569** | **8,523** | **1,781** | **773** | **2,554** | **11,077** |

| | Investment grade | | | | | | Non-investment grade | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **31 December 2017 (%)** | **Liquids** | **AAA** | **AA** | **A** | **BBB** | **Total** | **BB** | **B or lower** | **Total** | **%** |
| Australia | 7% | 13% | 9% | 17% | 30% | **76%** | 17% | 7% | **24%** | **100%** |
| United States | 17% | 2% | 3% | 17% | 26% | **65%** | 20% | 15% | **35%** | **100%** |
| Rest of World | 8% | 9% | 18% | 20% | 32% | **87%** | 11% | 2% | **13%** | **100%** |
| United Kingdom | 11% | 6% | 6% | 32% | 41% | **96%** | 4% | – | **4%** | **100%** |
| Europe | 7% | – | 8% | 25% | 50% | **90%** | 9% | 1% | **10%** | **100%** |
| New Zealand | 2% | 6% | 17% | 31% | 15% | **71%** | 23% | 6% | **29%** | **100%** |
| **Total** | **9%** | **9%** | **8%** | **19%** | **32%** | **77%** | **16%** | **7%** | **23%** | **100%** |

## Property portfolio overview

Life's property portfolio principally comprises directly held properties and is diversified across office, retail, and industrial properties.

Life's property portfolio of $3.7bn (net of debt) at 31 December 2017 represented 21% of Life's total investment assets, down 1% from 30 June 2017.

Life's property portfolio increased by $0.2bn (net of debt) in 1H18 due to one property acquisition, increased exposure to REITs and increases in property valuations.

Challenger Life has a policy that all properties are independently valued each year with approximately 50% valued in June and 50% valued in December. Internal valuations are also undertaken for properties not independently valued each June and December. An independent valuation is subsequently undertaken if the internal valuation shows a significant variance to the most recent independent valuation.

Life's direct property valuations increased by approximately 2% in 1H18, and exceeded Life's 2% per annum normalised capital growth assumption. Property valuation gains in 1H18 were supported by the renewal of a number of long-term leases and tightening of cap rates in some market segments.

Property acquisitions incur stamp duty and acquisition costs. Under Australian Accounting Standards, property acquisition and transaction costs are required to initially be capitalised. When the property is subsequently revalued, there is generally no value ascribed to the acquisition costs which may result in a reduction in the property valuation and corresponding negative investment experience. During 1H18, all properties acquired in 2H17 were subject to either an independent valuation or directors' valuation, with $3m of transaction costs (including stamp duty) offset against property valuation gains.

During 1H18 one commercial office property in Canberra was acquired for approximately $100m. Property acquisition costs including stamp duty of $5m was incurred and will be written off against property revaluations in 2H18.

Property includes a net $234m exposure to Japanese property (6% of the property portfolio), consisting of suburban shopping centres that are focused on non-discretionary retailing.

Property also includes a $238m investment in listed Australian REITs.

Rental income is diversified across sectors and tenants, with 54% (by 1H18 gross rental income) of tenants classified investment grade (i.e. rated BBB or higher).

The Australian Government is a major tenant, leasing a range of commercial office buildings and accounted for approximately 33% of 1H18 gross rental income[1].

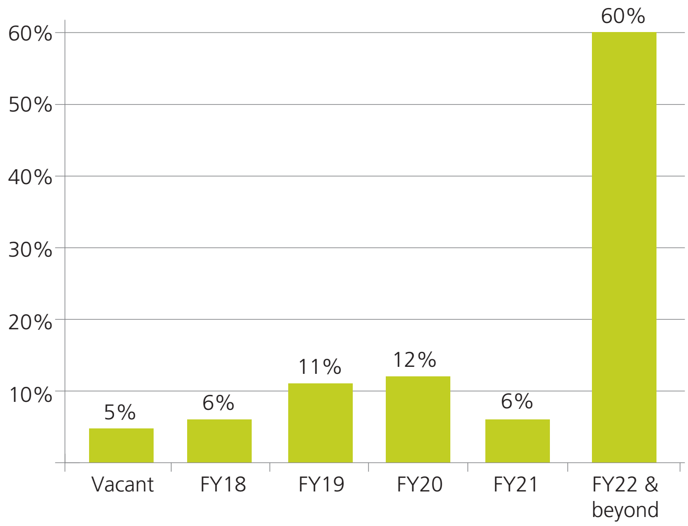
Full details of Life's property portfolio are listed on pages 32 and 34.

## Property portfolio summary

| % of total portfolio | 1H18 | 1H17 |
|---|---|---|
| Australian office | 51% | 47% |
| Australian retail | 26% | 28% |
| Australian industrial | 4% | 6% |
| Australian listed REITs | 7% | 5% |
| Australian unlisted REITs | 3% | 3% |
| **Australian total** | **91%** | **89%** |
| Japanese retail | 6% | 7% |
| Other (including offshore) | 3% | 4% |
| **Total** | **100%** | **100%** |

## Portfolio lease expiry overview[2]

The property portfolio generates long-term cash flows in order to match long-term liabilities. Approximately 60% of contracted leases expire in FY22 and beyond, demonstrating the long-term nature of property cash flows.




1 Represents total gross passing income attributable to the direct property portfolio.
2 Direct property portfolio and jointly held assets only and excludes Australian REITs and development assets.

# Direct property portfolio overview[1]

| **31 December 2017** | | **Office** | **Retail** | **Industrial** | **Total** |
|---|---|---|---|---|---|
| Total rent (%)[2] | | 55% | 38% | 7% | 100% |
| WALE | | 4.9 | 5.7 | 5.0 | 5.2 |
| | | | | | |
| Tenant credit ratings | | | | | |
| | AAA | 24% | – | – | 24% |
| | AA | 9% | 1% | – | 10% |
| | A | – | 1% | 1% | 2% |
| | BBB | 3% | 12% | 3% | 18% |
| | BB | 13% | 15% | 2% | 30% |
| | B or below | – | 2% | 1% | 3% |
| | Not rated | 3% | 5% | – | 8% |
| | Vacant | 3% | 2% | – | 5% |
| | **Total** | **55%** | **38%** | **7%** | **100%** |
| % of total gross rent | Investment grade | 36% | 14% | 4% | 54% |
| | Non-investment grade | 16% | 22% | 3% | 41% |
| | Vacant | 3% | 2% | – | 5% |

1 Direct property portfolio and jointly held assets only and excludes Australian REITs and development assets.
2 Includes vacant floors/suites available for lease.

# Direct property investments

| 31 December 2017 | | Acquisition date[1] | Total cost $m[2] | Carrying value $m | Cap rate 1H18 %[3] | Last external valuation date |
|---|---|---|---|---|---|---|
| **Australia** | | | | | | |
| Office | | | | | | |
| | 14 Childers Street, ACT | 01-Dec-17 | 97.0 | 97.0 | 6.75 | – |
| | 31 Queen Street, VIC | 31-Mar-11 | 97.4 | 158.7 | 5.25 | 31-Dec-17 |
| | 35 Clarence Street, NSW | 15-Jan-15 | 145.3 | 188.0 | 5.38 | 31-Dec-17 |
| | 53 Albert Street, QLD | 12-Dec-14 | 222.6 | 216.8 | 6.50 | 30-Jun-17 |
| | 215 Adelaide Street, QLD | 31-Jul-15 | 242.8 | 230.6 | 6.75 | 30-Jun-17 |
| | 565 Bourke Street, VIC | 28-Jan-15 | 89.0 | 97.6 | 5.50 | 31-Dec-17 |
| | 82 Northbourne Avenue, ACT | 1-Jun-17 | 60.4 | 57.5 | 6.00 | 31-Dec-17 |
| | ABS Building, ACT | 01-Jan-00 | 120.1 | 145.5 | 5.75 | 31-Dec-17 |
| | County Court, VIC | 30-Jun-00 | 216.0 | 305.0 | 6.13 | 31-Dec-17 |
| | DIBP (formerly DIAC) Building, ACT | 01-Dec-01 | 103.2 | 125.0 | 6.50 | 31-Dec-17 |
| | Discovery House, ACT | 28-Apr-98 | 88.6 | 105.0 | 7.50 | 31-Dec-17 |
| | Elder House, SA | 21-Jun-02 | 48.3 | 23.7 | 9.00 | 30-Jun-17 |
| | Executive Building, TAS | 30-Mar-01 | 33.6 | 42.2 | 7.50 | 31-Dec-17 |
| | Makerston House, QLD | 14-Dec-00 | 67.8 | 72.0 | 7.63 | 31-Dec-17 |
| Retail | | | | | | |
| | Bunbury Forum, WA | 03-Oct-13 | 153.2 | 146.5 | 6.25 | 30-Jun-17 |
| | Channel Court, TAS | 21-Aug-15 | 81.2 | 82.9 | 7.25 | 30-Jun-17 |
| | Gateway, NT | 01-Jul-15 | 100.8 | 112.2 | 5.75 | 31-Dec-17 |
| | Golden Grove, SA | 31-Jul-14 | 148.1 | 157.1 | 6.00 | 31-Dec-17 |
| | Karratha, WA | 28-Jun-13 | 54.5 | 52.6 | 7.00 | 30-Jun-17 |
| | Kings Langley, NSW | 29-Jul-01 | 16.0 | 23.6 | 6.25 | 30-Jun-17 |
| | Lennox, NSW | 27-Jul-13 | 28.2 | 36.0 | 6.25 | 30-Jun-17 |
| | Next Hotel, QLD | 25-Mar-15 | 142.4 | 134.5 | 6.14 | 31-Dec-17 |
| | North Rocks, NSW | 18-Sep-15 | 140.1 | 131.9 | 6.50 | 30-Jun-17 |
| Industrial | | | | | | |
| | 21 O'Sullivan Circuit, NT | 27-Jan-16 | 47.6 | 40.4 | 8.00 | 31-Dec-17 |
| | 31 O'Sullivan Circuit, NT | 27-Jan-16 | 28.7 | 25.8 | 8.25 | 31-Dec-17 |
| | Cosgrave Industrial Park, Enfield, NSW | 31-Dec-08 | 91.8 | 110.0 | 6.07 | 31-Dec-17 |
| Mixed use | | | | | | |
| | The Barracks, QLD | 31-Oct-14 | 153.7 | 151.2 | 6.50 | 30-Jun-17 |
| **Total Australia** | | | **2,818.4** | **3,069.3** | | |

1 Acquisition date represents the date of CLC's initial acquisition or consolidation of the investment vehicle holding the asset.
2 Total cost represents the original acquisition cost plus additions less full and partial disposals since acquisition date.
3 The capitalisation rate is the rate at which net market income is capitalised to determine the value of the property. The rate is determined with regards to market evidence.

# Direct property investments

| 31 December 2017 | | | Acquisition date[1] | Total cost $m[2] | Carrying value $m | Cap rate 1H18 %[3] | Last external valuation date |
|---|---|---|---|---|---|---|---|
| **Japan** | | | | | | | |
| | Retail | | | | | | |
| | | Aeon Kushiro | 31-Jan-10 | 30.5 | 31.8 | 5.50 | 30-Jun-17 |
| | | Carino Chitosedai | 31-Jan-10 | 118.4 | 120.3 | 4.60 | 31-Dec-17 |
| | | Carino Tokiwadai | 31-Jan-10 | 77.0 | 74.7 | 4.70 | 30-Jun-17 |
| | | DeoDeo Kure | 31-Jan-10 | 31.9 | 28.0 | 5.60 | 30-Jun-17 |
| | | Fitta Natalie Hatsukaichi | 28-Aug-15 | 11.4 | 12.9 | 5.80 | 31-Dec-17 |
| | | Izumiya Hakubaicho | 31-Jan-10 | 68.8 | 66.7 | 4.90 | 31-Dec-17 |
| | | Kansai Super Saigo | 31-Jan-10 | 13.1 | 12.4 | 5.50 | 30-Jun-17 |
| | | Kojima Nishiarai | 31-Jan-10 | 12.2 | 13.4 | 4.50 | 30-Jun-17 |
| | | Life Asakusa | 31-Jan-10 | 27.8 | 31.5 | 4.50 | 30-Jun-17 |
| | | Life Higashi Nakano | 31-Jan-10 | 32.9 | 34.1 | 4.50 | 31-Dec-17 |
| | | Life Nagata | 31-Jan-10 | 25.2 | 25.7 | 5.00 | 30-Jun-17 |
| | | MaxValu Tarumi | 28-Aug-15 | 16.9 | 17.6 | 5.70 | 31-Dec-17 |
| | | Seiyu Miyagino | 31-Jan-10 | 9.7 | 9.4 | 5.70 | 30-Jun-17 |
| | | Valor Takinomizu | 31-Jan-10 | 26.9 | 22.9 | 5.70 | 31-Dec-17 |
| | | Valor Toda | 31-Jan-10 | 42.5 | 40.5 | 5.50 | 30-Jun-17 |
| | | Yaoko Sakato Chiyoda | 31-Jan-10 | 19.3 | 16.9 | 4.90 | 31-Dec-17 |
| **Total Japan** | | | | **564.5** | **558.8** | | |
| **Europe** | | | | | | | |
| | Industrial | | | | | | |
| | | 105 Route d'Orleans, Sully sur Loire | 31-Dec-08 | 27.1 | 9.3 | 8.00 | 31-Dec-17 |
| | | Gennevilliers,140 Rue Marcel Paul | 31-Dec-08 | 14.1 | 10.5 | 7.50 | 31-Dec-17 |
| | | Parcay-Meslay, ZAC Papillon | 31-Dec-08 | 10.1 | 7.6 | 7.25 | 31-Dec-17 |
| | | Villeneuve les Beziers, Rue Charles Nicolle | 31-Dec-08 | 18.6 | 13.3 | 7.25 | 31-Dec-17 |
| | Retail | | | | | | |
| | | Aulnay sous Bois, Avenue de Savigny | 31-Dec-08 | 20.3 | 12.3 | 6.25 | 31-Dec-17 |
| **Total Europe** | | | | **90.2** | **53.0** | | |
| **Total Overseas** | | | | **654.7** | **611.8** | | |
| **Development** | | | | | | | |
| | | 839 Collins Street | 22-Dec-16 | 55.2 | 55.2 | – | – |
| | | Gateway | 01-Jul-15 | 14.9 | 11.4 | – | – |
| | | Maitland | 06-Dec-06 | 29.4 | 5.0 | – | – |
| | | TRE Data Centre | 14-Apr-10 | 13.4 | 13.4 | – | – |
| **Total development** | | | | **112.9** | **85.0** | | |
| **Total direct portfolio investments** | | | | **3,586.0** | **3,766.1** | | |

1 Acquisition date represents the date of CLC's initial acquisition or consolidation of the investment vehicle holding the asset.
2 Total cost represents the original acquisition cost plus additions less full and partial disposals since acquisition date.
3 The capitalisation rate is the rate at which net market income is capitalised to determine the value of the property. The rate is determined with regards to market evidence.

## Equity and other portfolio overview

Life's equity and other portfolio of $1.6bn increased by $0.3bn in 1H18. Equity and other investment represented 10% of Life's total investment assets at 31 December 2017, up from 9% at 30 June 2017.

Life's equity and other portfolio consists of beta investments, and alternative and other investments.

Listed beta equity investments of $661m, increased by $84m in 1H18 and represent investments in long only equities, including ETFs. Unlisted beta equity investments of $224m, decreased by $49m in 1H18 and represent investments managed by a range of third party investment managers. Beta investment returns are expected to be correlated to listed equity market returns.

Alternatives and other equity investments of $758m, increased by $248m in 1H18 and represent a range of investments including absolute return funds, unlisted investments, market neutral investment strategies and insurance linked investments. Returns are expected to generally be less correlated to listed equity market returns.

## Equity and other portfolio

| 31 December 2017 ($m) | Domestic | Offshore | Total |
|---|---|---|---|
| Listed beta | 89 | 572 | 661 |
| Unlisted beta | 11 | 213 | 224 |
| Alternatives and other | 174 | 584 | 758 |
| **Total** | 274 | 1,369 | 1,643 |

## Infrastructure portfolio overview

Life's infrastructure portfolio of $0.7bn (net of debt) represented 4% of Life's investment assets at 31 December 2017, and increased by $0.2bn in 1H18.

Challenger Life seeks infrastructure assets that generate reliable and consistent cash flows, which are preferably inflation linked, giving rise to sustainable income growth over time. Infrastructure investments comprise directly held infrastructure assets and indirectly held listed and unlisted investments.

Approximately 40% of the infrastructure portfolio is unlisted.

The infrastructure portfolio is diversified across a number of geographic regions and sectors.

## Infrastructure portfolio by sector

| 31 December 2017 | $m | % |
|---|---|---|
| Logistics | 81 | 12% |
| Utilities | 79 | 12% |
| Patronage | 19 | 3% |
| Airport | 43 | 6% |
| Power Generation | 22 | 3% |
| Renewable | 106 | 16% |
| Core infrastructure | 316 | 48% |
| **Total** | **666** | **100%** |

## Infrastructure portfolio by geography

| 31 December 2017 | $m | % |
|---|---|---|
| North America | 192 | 29% |
| Australia | 187 | 28% |
| United Kingdom | 104 | 16% |
| Asia | 83 | 12% |
| Europe | 62 | 9% |
| South America | 38 | 6% |
| **Total** | **666** | **100%** |

# Challenger Life Company Limited (CLC) debt facilities

| $m | 1H18 | FY17 | 1H17 | FY16 | 1H16 |
|---|---|---|---|---|---|
| Controlled property debt | 491.9 | 534.5 | 535.8 | 572.9 | 652.9 |
| Subordinated debt | 405.3 | 393.6 | 384.8 | 576.7 | 576.5 |
| Repurchase agreements | 3,387.9 | 3,287.5 | 3,482.9 | 2,454.2 | 1,875.1 |
| Infrastructure debt | 199.2 | 201.1 | 202.9 | 204.3 | 206.0 |
| Other finance | 16.0 | 17.0 | 17.8 | 18.8 | 19.5 |
| **Total CLC debt facilities** | **4,500.3** | **4,433.7** | **4,624.2** | **3,826.9** | **3,330.0** |

## CLC debt facilities

CLC debt facilities include debt which is non-recourse to the Challenger Group and secured against assets held in investment vehicles by CLC, including direct properties and infrastructure investments. CLC debt facilities increased by $66m in 1H18, due to an increase in repurchase agreements used to hedge interest rate movements (up $100m), partially offset by a reduction in controlled property debt (down $43m).

## Repurchase agreements

CLC enters into repurchase agreements whereby fixed income securities are sold for cash whilst simultaneously agreeing to repurchase the fixed income security at a fixed price and fixed date in the future. The use of repurchase agreements is part of Challenger's strategy to hedge interest rate movements.

CLC uses Australian Commonwealth and Semi Government Bonds with repurchase agreements, interest rate swaps and bond futures to hedge movements in interest rates on its asset portfolio, annuity policy liabilities, Guaranteed Index Return mandates, and the Challenger Index Plus Fund.

The Commonwealth and State Governments continued to increase supply and extend the duration of their bond curves. As a result, bonds have provided a more cost effective hedge than swaps, particularly for longer dated liabilities.

Derivatives such as interest rate swaps and bond futures are self-financing, whereas the use of bonds require the use of repurchase agreement financing.

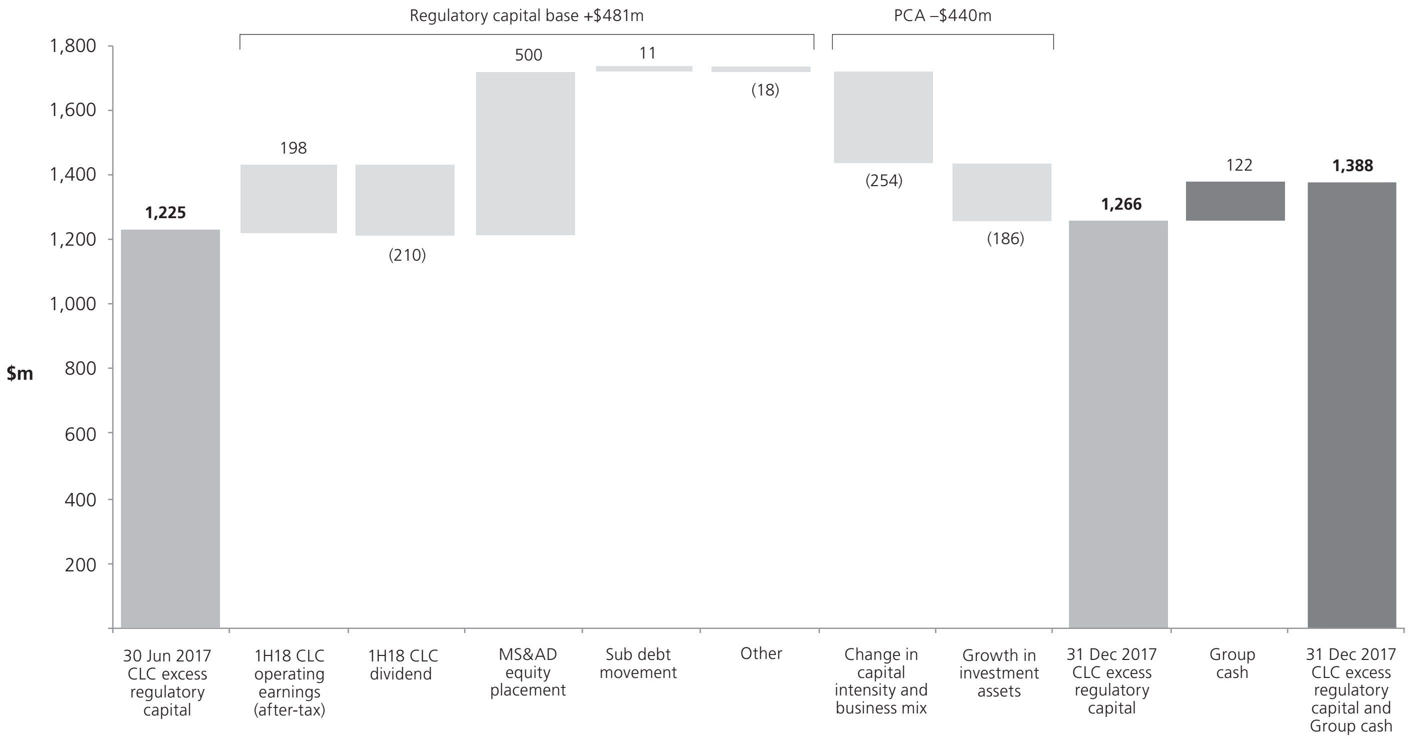
# Challenger Life Company (CLC) regulatory capital

| $m | 1H18 | FY17 | 1H17 | FY16 | 1H16 |
|---|---|---|---|---|---|
| **CLC Regulatory capital** | | | | | |
| Common Equity Tier 1 (CET1) regulatory capital | 2,638.4 | 2,169.0 | 2,046.0 | 2,003.6 | 1,951.8 |
| Additional Tier 1 | 805.0 | 805.0 | 345.0 | 345.0 | 345.0 |
| Tier 2 regulatory capital – subordinated debt[1] | 406.8 | 395.4 | 386.7 | 445.5 | 477.5 |
| **CLC total regulatory capital base** | **3,850.2** | **3,369.4** | **2,777.7** | **2,794.1** | **2,774.3** |
| **CLC Prescribed Capital Amount (PCA)** | | | | | |
| Asset risk charge | 2,502.4 | 2,067.1 | 1,933.3 | 1,712.0 | 1,731.3 |
| Insurance risk charge | 164.9 | 157.5 | 152.7 | 168.3 | 132.7 |
| Operational risk charge | 42.8 | 38.7 | 34.9 | 28.7 | 22.7 |
| Aggregation benefit | (125.7) | (119.2) | (115.5) | (125.3) | (100.4) |
| **CLC prescribed capital amount – excluding transition relief** | **2,584.4** | **2,144.1** | **2,005.4** | **1,783.7** | **1,786.3** |
| Transition relief | – | – | – | – | (107.6) |
| **CLC prescribed capital amount** | **2,584.4** | **2,144.1** | **2,005.4** | **1,783.7** | **1,678.7** |
| **CLC excess over prescribed capital amount** | **1,265.8** | **1,225.3** | **772.3** | **1,010.4** | **1,095.6** |
| PCA ratio (times) | 1.49 | 1.57 | 1.39 | 1.57 | 1.65 |
| Tier 1 ratio (times) | 1.33 | 1.39 | 1.19 | 1.32 | 1.37 |
| CET1 ratio (times) | 1.02 | 1.01 | 1.02 | 1.12 | 1.16 |

**Tier 2 regulatory capital – subordinated debt[1]**

| Call date | Maturity date | 1H18 | FY17 | 1H17 | FY16 | 1H16 |
|---|---|---|---|---|---|---|
| 24 Nov 2022 | 24 Nov 2042 | 406.8 | – | – | – | – |
| 7 Nov 2017 | 7 Nov 2037 | – | 395.4 | 386.7 | 378.0 | 374.7 |
| 7 Jun 2013 | 7 Dec 2016 | – | – | – | 33.4 | 67.6 |
| 7 Dec 2016 | 7 Dec 2026 | – | – | – | 34.1 | 35.2 |
| | | **406.8** | **395.4** | **386.7** | **445.5** | **477.5** |

## Movement in CLC excess regulatory capital and Group cash graph




1. 1H18 Tier 2 regulatory capital – subordinated debt ($407m) differs to the Group balance sheet ($405m) due to accrued interest.

# Challenger Life Company Limited (CLC) regulatory capital

## Capital management

CLC holds capital in order to ensure that under a range of adverse scenarios it can continue to meet its regulatory and contractual obligations to customers. CLC is regulated by the Australian Prudential Regulation Authority (APRA) and is required to hold a minimum level of regulatory capital. CLC has an ongoing and open engagement with APRA.

CLC's regulatory capital base and prescribed capital amounts have been calculated based on APRA prudential capital standards.

## CLC excess regulatory capital

CLC's excess capital above APRA's prescribed capital amount at 31 December 2017 (1H18) was $1.3bn, an increase of $40m.

CLC's regulatory capital base at 31 December 2017 was $3.9bn and increased by $0.5bn in 1H18. The increase was a result of the equity placement to MS&AD ($0.5bn) in August 2017, with proceeds used to increase CLC's Common Equity Tier 1 Capital.

CLC's PCA at 31 December 2017 was $2.6bn and increased by $0.4bn in 1H18, with the increase due to growth in Life's investment assets, which increased by $1.4bn in 1H18, and an increase in capital intensity.

Following the equity placement to MS&AD ($0.5bn) excess capital was deployed into listed real estate investment trusts, listed infrastructure and alternatives. The impact of this investment allocation was an increase in capital intensity, being the ratio of CLC's PCA to investment assets, which increased from 13.7% at 30 June 2017 to 15.2% at 31 December 2017. The capital intensity is expected to reduce over time as the annuity book grows and investments transition.

CLC's capital ratios at 31 December 2017 were as follows:

- PCA ratio of 1.49 times;
- Total Tier 1 ratio of 1.33 times; and
- Common Equity Tier 1 (CET1) ratio of 1.02 times.

APRA's Prudential Standards require Total Tier 1 capital to be at least 80% of the PCA and CET1 capital to be at least 60% of the PCA. Both Challenger's Total Tier 1 capital ratio (1.33 times) and CET1 capital ratio (1.02 times) are well in excess of APRA's minimum requirements.

CLC maintains a target level of capital representing APRA's prescribed capital amount plus a target surplus. The target surplus is a level of excess capital that CLC seeks to carry over and above APRA's minimum requirement.

CLC's target surplus is set to ensure it provides a buffer so that CLC can continue to meet APRA's minimum requirements, with allowance for adverse market or insurance risk experience.

CLC uses internal capital models to determine its target surplus, which are risk-based and responsive to changes in CLC's asset allocation and market conditions.

While CLC does not target a specific PCA ratio, CLC's internal capital models generate a PCA ratio based upon asset allocation, business mix and economic circumstances. CLC's target PCA range is 1.3 times to 1.6 times. This range may change over time and is dependent on a number of factors.

## Subordinated debt

In November 2017 CLC replaced its existing $400m Tier 2 subordinated debt instrument with new Tier 2 subordinated notes ($400m).

The subordinated notes qualify as Tier 2 regulatory capital under APRA's prudential standards and are floating rate notes, paying interest at a margin of 2.10% above the 3-month bank bill swap rate. The subordinated notes mature in November 2042 with CLC having the option to redeem in November 2022, subject to APRA approval.

The subordinated notes include a holder conversion option which allows the note holder to convert the notes into Challenger ordinary shares in November 2024 if CLC has not already called the subordinated notes.

Proceeds from the subordinated notes issuance were used to repay CLC's existing Tier 2 subordinated debt instrument that had a call date in November 2017.

## Group cash

In addition to CLC's excess regulatory capital, Challenger maintains cash at a Group level, which can be utilised to meet regulatory requirements. Group cash at 31 December 2017 was $122m, up $38m from 30 June 2017.

Challenger also maintains an undrawn Group banking facility of $400m, which is maintained to provide additional financial flexibility.

## APRA's Level 3 (conglomerate) capital proposals

The Group is a Level 3 entity under the APRA conglomerates framework. Level 3 groups are groups of companies that perform material activities across more than one APRA-regulated industry and/or in one or more non-APRA regulated industries.

APRA's non capital conglomerate prudential standards relating to measurement, management, monitoring, reporting aggregate risk exposures and intragroup transactions and exposures came into effect 1 July 2017. In March 2016, APRA announced that it would defer the implementation of conglomerate capital requirements until a number of other domestic and international policy initiatives were further progressed.

# Profit and equity sensitivities

| $m | Change in variable | Profit/(loss) after tax 1H18 | Change in equity 1H18 | Profit/(loss) after tax FY17 | Change in equity FY17 |
|---|---|---|---|---|---|
| **Credit risk** | | | | | |
| Fixed income assets (change in credit spreads) | +50bps | (118.0) | (118.0) | (98.9) | (98.9) |
| | -50bps | 118.0 | 118.0 | 98.9 | 98.9 |
| Policy liabilities (illiquidity premium change in credit spreads) | +50bps | 48.5 | 48.5 | 44.8 | 44.8 |
| | -50bps | (48.5) | (48.5) | (44.8) | (44.8) |
| Total | | (69.5) | (69.5) | (54.1) | (54.1) |
| | | 69.5 | 69.5 | 54.1 | 54.1 |
| **Property risk** | | | | | |
| Direct property | +1% | 25.8 | 25.8 | 24.2 | 24.2 |
| | -1% | (25.8) | (25.8) | (24.2) | (24.2) |
| Australian listed property securities | +10% | 16.7 | 16.7 | 11.1 | 11.1 |
| | -10% | (16.7) | (16.7) | (11.1) | (11.1) |
| Other property securities | +10% | 9.9 | 9.9 | 10.1 | 10.1 |
| | -10% | (9.9) | (9.9) | (10.1) | (10.1) |
| Total | | 52.4 | 52.4 | 45.4 | 45.4 |
| | | (52.4) | (52.4) | (45.4) | (45.4) |
| **Infrastructure and equity risk** | | | | | |
| Infrastructure investments | +10% | 46.6 | 46.6 | 34.6 | 34.6 |
| | -10% | (46.6) | (46.6) | (34.6) | (34.6) |
| Equity investments | +10% | 115.0 | 115.0 | 95.2 | 95.2 |
| | -10% | (115.0) | (115.0) | (95.2) | (95.2) |
| Total | +10% | 161.6 | 161.6 | 129.8 | 129.8 |
| | -10% | (161.6) | (161.6) | (129.8) | (129.8) |
| **Life insurance risk** | | | | | |
| **Mortality, morbidity and longevity**[1] | | | | | |
| Life insurance contract liabilities | +50% | (22.1) | (22.1) | (18.2) | (18.2) |
| | -50% | 22.1 | 22.1 | 18.2 | 18.2 |
| **Interest rate risk** | | | | | |
| Change in interest rates | +100bps | 6.7 | 6.7 | 1.4 | 1.4 |
| | -100bps | (6.7) | (6.7) | (1.4) | (1.4) |
| **Foreign exchange risk** | | | | | |
| British Pound | +10% | 0.4 | 0.4 | 0.1 | 0.1 |
| | -10% | (0.4) | (0.4) | (0.1) | (0.1) |
| US Dollar | +10% | (0.1) | (0.1) | (0.1) | (0.1) |
| | -10% | 0.1 | 0.1 | 0.1 | 0.1 |
| Euro | +10% | (0.1) | (0.1) | (0.1) | (0.1) |
| | -10% | 0.1 | 0.1 | 0.1 | 0.1 |
| Japanese Yen | +10% | – | 0.2 | – | 0.2 |
| | -10% | – | (0.2) | – | (0.2) |
| Other | +10% | (0.1) | (0.1) | (0.1) | (0.1) |
| | -10% | 0.1 | 0.1 | 0.1 | 0.1 |

1 Mortality, morbidity and longevity life insurance contract liabilities sensitivity is net of any reinsurance with third parties.

# Profit and equity sensitivities

Profit and equity sensitivities set out the expected impact from changes in a range of economic and investment market variables on Challenger's earnings and balance sheet. These sensitivities represent the after tax impact, assuming a tax rate of 30%.

The sensitivities are not forward looking and make no allowance for events occurring after 31 December 2017.

If using these sensitivities as forward looking, an allowance for changes post 31 December 2017, such as sales and asset growth, should be made.

These sensitivities assess the risk of changes in economic and investment markets on the valuation of assets, which in turn impact earnings. The earnings impact is included in investment experience and does not take into consideration the impact of any under or over performance of normalised growth assumptions for each asset category. Refer to page 48 for normalised growth assumptions.

These sensitivities do not include the indirect impact on fees for the Funds Management business.

Refer to the Risk Management Framework below for additional detail on how to apply the profit and equity sensitivities.

# Risk Management Framework

CLC is required under APRA Prudential Standards to maintain regulatory capital in order to ensure that under a range of adverse scenarios it can continue to meet its regulatory and contractual obligations to customers.

Challenger is exposed to a variety of financial risks, including market risk (credit spread risk, currency risk, interest rate risk, equity risk), credit default risk and liquidity risk.

The management of these risks is fundamental to Challenger's business and building long-term shareholder value.

The Challenger Limited Board is responsible, in conjunction with senior management, for understanding risks associated with the business and implementing structures and policies to adequately monitor and manage these risks.

The Board has established the Group Risk Committee (GRC) and Group Audit Committee (GAC) to assist in discharging certain responsibilities. In particular, these committees assist the Board in setting the risk appetite and ensuring Challenger has an effective Risk Management Framework, incorporating management, operational and financial controls.

The Executive Risk Management Committee (ERMC) is an executive committee, chaired by the Chief Risk Officer (CRO), which assists the GRC, GAC and Board in discharging their risk management obligations by implementing the Board approved Risk Management Framework.

The Group's Risk Management division has day-to-day responsibility for monitoring the implementation of the framework with oversight, analysis, monitoring and reporting of risks. The CRO provides regular reporting to the GRC, and the Board.

## Risk appetite

Challenger's risk appetite requires a range of financial risks, including foreign exchange, interest rate, and inflation risk, to be minimised. As a result Challenger takes an active approach to hedging and limiting these financial risks.

Challenger's risk appetite statement provides that, subject to acceptable returns, and subject to limits, Challenger can retain exposure to credit risk, property risk, equity and infrastructure risk and life insurance risk.

| Accept exposure (subject to appropriate returns) | Minimise exposure |
|---|---|
| ✓ Credit risk | ✗ Foreign exchange risk |
| ✓ Property risk | ✗ Interest rate risk |
| ✓ Equity & infrastructure risk | ✗ Inflation risk |
| ✓ Life insurance risk | ✗ Liquidity risk |
| | ✗ Licence risk |
| | ✗ Operational risk |

## Credit default risk

Credit default risk is the risk of loss in value of an investment due to a counterparty failing to discharge an obligation.

Challenger's approach to credit management utilises a credit risk framework to ensure that the following principles are adhered to:

- credit risk management teams separation from risk originators;
- recognition of the different risks in the various businesses;
- credit exposures being systematically controlled and monitored;
- credit exposures being regularly reviewed in accordance with existing credit procedures; and
- ensuring credit exposures include the impact from derivative transactions.

Challenger makes use of external ratings agencies (Standard & Poor's, Fitch, Moody's) to determine credit ratings.

Where a counterparty or debt obligation is rated by multiple external rating agencies, Challenger will use Standard & Poor's ratings where available.

All credit exposures with an external rating are also reviewed internally and cross-referenced to the external rating, if applicable.

Where external credit ratings are not available, internal credit ratings are assigned by appropriately qualified and experienced credit personnel who operate separately from the risk originators.

## Credit spread risk sensitivity

Challenger is exposed to price movements resulting from credit spread fluctuations through its fixed income securities (net of subordinated debt) and the fair value of annuity and other liabilities.

As at 31 December 2017, a 50 basis point increase/decrease in credit spreads would have resulted in an unrealised loss/gain of $118m (after tax) on fixed income investments (net of debt).

In accordance with Prudential Standards and Australian Accounting Standards, Challenger Life values term annuities at fair value and lifetime annuities using a risk-free discount rate, both of which are based on the Australian Commonwealth Government bond curve plus an illiquidity premium. Movements in fixed income credit spreads impact the illiquidity premium.

As at 31 December 2017, a 50 basis point increase/decrease in credit spreads results in an unrealised gain/loss of $49m (after tax) on the fair value of annuity liabilities.

As the 31 December 2017, the net impact after considering both fixed income assets (net of subordinated debt) and annuity liabilities of a 50 basis point increase/decrease in credit spreads results in an unrealised loss/gain of $70m (after tax).

## Property risk

Property risk is the potential impact of movements in the market value of property investments on Challenger's profit and includes leasing risk which may impact the potential cash flow from these investments.

## Property risk sensitivity

Challenger is exposed to movements in the market value of property investments, both directly held investment properties and property securities.

The direct property sensitivities included on page 39 show the impact of a change in property valuations on balance date and are based on Life's gross direct property investments of $3.8bn (net investments of $3.3bn plus debt of $0.5bn). A 1% move in the direct property portfiolo and 10% move in the indirect property portfiolo at 31 December 2017 would result in a $52m move in the valuation of property.

## Infrastructure risk

Challenger is exposed to movements in the market value of listed and unlisted infrastructure investments. Approximately 40% of the infrastructure portfolio is diversified accross a number of geographic regions and sectors.

## Equity risk

Equity risk is the potential impact of movements in the market value of listed equity investments, unlisted equity investments and investments in absolute return strategies. Returns for unlisted equity and absolute return strategies are generally uncorrelated to listed equity market returns.

Challenger holds equities as part of its investment portfolio in order to provide diversification across the investment portfolio.

## Infrastructure and equity risk sensitivity

Challenger is exposed to movements in the market value of listed and unlisted infrastructure and equity investments. A 10% move in infrastructure and equity markets at 31 December 2017 would result in a $162m (after tax) movement in the valuation of infrastructure and equity investments.

## Liquidity risk

Liquidity risk is the risk Challenger will encounter difficulty in raising funds to meet cash commitments associated with financial instruments and contracted payment obligations to annuitants. This may result from either the inability to sell financial assets at face value, a counterparty failing on repayment of a contractual obligation, or the inability to generate cash inflows as anticipated.

Challenger's liquidity policy aims to ensure that it has sufficient liquidity to meet its obligations on a short, medium and long-term basis. In setting the level of sufficient liquidity, Challenger considers new business activities in addition to current contracted obligations.

In determining the required levels of liquidity, Challenger considers:

- minimum cash requirements;
- collateral and margin call buffers;
- Australian Financial Services License requirements;
- cash flow forecasts;
- associated reporting requirements;
- other liquidity risks; and
- contingency plans.

Required annuity cash outflows are met from contracted investment cash flows together with assets in Challenger's liquidity pool. As a result, cash flows are well-matched and continue to be rebalanced through time.

## Life insurance risk

Lifetime annuities provide guaranteed payments to customers for life. Through selling lifetime annuities and assuming wholesale reinsurance agreements, CLC is assuming longevity risk, which is the risk annuitant customers live longer, in aggregate, than expected. This is in contrast to mortality risk, which is the risk that people die earlier than expected. CLC is exposed to mortality and morbidity risks on the wholesale mortality reinsurance business.

CLC is required under APRA Prudential Standards to maintain regulatory capital in relation to the longevity, mortality and morbidity risks it carries. CLC manages some of its longevity risk exposure by using reinsurance for closed lifetime annuity portfolios. CLC regularly reviews the portfolio for longevity experience to ensure longevity assumptions remain appropriate.

Mortality and morbidity rates are based on industry standards which are adjusted for CLC's own recent experience, and include an allowance for future rates of mortality improvement.

CLC assumes future mortality rates for individual lifetime annuities will improve by between 0% and 2.6% per annum, depending on different age cohorts. This has the impact of increasing the life expectancy of a male aged 65 from 22 years (per the base mortality rates) to 25 years.

## Mortality, morbidity and longevity sensitivities

The mortality sensitivities on page 39 set out the expected impact of an improvement in mortality. This is in addition to the mortality improvements Challenger already assumes.

A 50% increase in mortality improvement rates would increase the life expectancy of a male aged 65 from 25 years to 26 years.

## Foreign exchange risk

It is Challenger's policy to seek to hedge the exposure of all balance sheet items for movements in foreign exchange rates.

Currency exposure arises primarily as a result of Life's investments in Europe (including the United Kingdom), Japan and the United States. As a result, currency risk arises from fluctuations in the value of the Euro, British Pound, Japanese Yen and US Dollar against the Australian Dollar.

In order to protect against foreign currency exchange rate movements, Challenger enters into foreign currency derivatives which limit Challenger's exposure to currency movements.

## Foreign exchange sensitivity

The impact of movements in foreign currencies on Challenger's profit and loss and balance sheet are set out on page 39. As a result of foreign currency derivatives in place, Challenger's profit and loss is not materially sensitive to movements in foreign currency rates.

## Interest rate risk

Interest rate risk is the risk of fluctuations in Challenger's earnings arising from movements in market interest rates, including changes in the absolute level of interest rates, the shape of the yield curve, and the margin between different yield curves.

CLC's market risk policy sets out the relevant risk limits for interest rate exposure. It is CLC's policy to minimise the impact of interest rate movements on its projected future cash flows.

## Interest rate sensitivity

The impact of movements in interest rates on Challenger's profit and loss and balance sheet are set out on page 39.

The sensitivities assume the change in variable occurs on 31 December 2017, and are based on assets and liabilities held at that date. It is Challenger's policy to minimise the impact of movements in interest rates via the use of interest rate swaps, Australian Commonwealth Government bonds and bond futures. As a result the interest rate sensitivities on page 39 show Challenger's profit is not materially sensitive to changes in base interest rates.

# Funds Management financial results

| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| **Fidante Partners** | | | | | |
| Fidante Partners income[1] | 36.5 | 38.1 | 39.5 | 33.8 | 37.5 |
| Performance fees | 6.4 | 1.3 | 1.1 | 3.1 | 3.8 |
| **Net income** | **42.9** | **39.4** | **40.6** | **36.9** | **41.3** |
| | | | | | |
| **Challenger Investment Partners (CIP)** | | | | | |
| CIP Income[2] | 29.1 | 29.3 | 24.7 | 23.7 | 25.8 |
| **Total net fee income** | **72.0** | **68.7** | **65.3** | **60.6** | **67.1** |
| | | | | | |
| Personnel expenses | (29.9) | (30.7) | (31.9) | (31.5) | (30.9) |
| Other expenses | (15.0) | (13.6) | (12.7) | (13.3) | (14.6) |
| **Total expenses** | **(44.9)** | **(44.3)** | **(44.6)** | **(44.8)** | **(45.5)** |
| **EBIT** | **27.1** | **24.4** | **20.7** | **15.8** | **21.6** |
| | | | | | |
| **Performance analysis** | | | | | |
| Fidante Partners – income margin (bps)[3] | 16 | 16 | 18 | 18 | 20 |
| Challenger Investment Partners – income margin (bps)[3] | 34 | 38 | 34 | 36 | 39 |
| Cost to income ratio | 62.4% | 64.5% | 68.3% | 73.9% | 67.8% |
| Net assets – average[4] | 194.9 | 185.4 | 176.9 | 165.9 | 151.3 |
| RoE (pre-tax) | 27.6% | 26.5% | 23.2% | 19.2% | 28.4% |
| | | | | | |
| Fidante Partners | 56,031 | 50,960 | 46,958 | 43,012 | 41,605 |
| Challenger Investment Partners | 17,397 | 15,945 | 15,155 | 13,650 | 13,093 |
| **Closing FUM – total** | **73,428** | **66,905** | **62,113** | **56,662** | **54,698** |
| | | | | | |
| Fidante Partners | 54,120 | 48,791 | 44,815 | 41,973 | 41,710 |
| Challenger Investment Partners | 16,853 | 15,725 | 14,308 | 13,346 | 13,128 |
| **Average FUM – total[5]** | **70,973** | **64,516** | **59,123** | **55,319** | **54,838** |
| | | | | | |
| **FUM and net flows analysis** | | | | | |
| Fidante Partners[6] | 2,497.0 | 2,384.8 | 1,741.0 | 1,332.1 | (3,941.8) |
| Challenger Investment Partners | 1,437.3 | 618.7 | 1,476.1 | 507.1 | (414.6) |
| Net flows | 3,934.3 | 3,003.5 | 3,217.1 | 1,839.2 | (4,356.4) |
| Distributions | (339.1) | (248.2) | (256.0) | (203.1) | (338.0) |
| Market linked movement | 2,927.3 | 2,037.1 | 2,490.3 | 327.6 | 1,490.0 |
| **Total FUM movement** | **6,522.5** | **4,792.4** | **5,451.4** | **1,963.7** | **(3,204.4)** |

1 Fidante Partners income includes equity accounted profits, distribution fees, administration fees and Fidante Partners Europe transaction fees.
2 CIP income includes asset based management fees and other income. Other income includes leasing fees, asset acquisition and disposal fees, development and placement fees.
3 Income margin represents net income divided by average FUM.
4 Net assets – average calculated on a monthly basis.
5 Average FUM calculated on a monthly basis.
6 Funds Management 1H16 net flows include $5.4bn derecognition of Kapstream following the sale in July 2015.

# Assets and Funds Under Management and net flows

| $m | Q2 18 | Q1 18 | Q4 17 | Q3 17 | Q2 17 |
|---|---|---|---|---|---|
| **Funds Under Management** | | | | | |
| **Fidante Partners** | | | | | |
| Equities | 24,295 | 23,343 | 22,365 | 21,576 | 20,833 |
| Fixed income | 24,299 | 23,237 | 21,808 | 20,393 | 19,726 |
| Alternatives | 7,437 | 7,110 | 6,787 | 6,426 | 6,399 |
| Total Fidante Partners | 56,031 | 53,690 | 50,960 | 48,395 | 46,958 |
| **Challenger Investment Partners** | | | | | |
| Fixed income | 12,290 | 12,538 | 11,051 | 11,068 | 10,357 |
| Property | 5,107 | 4,734 | 4,895 | 4,808 | 4,798 |
| Total Challenger Investment Partners | 17,397 | 17,272 | 15,946 | 15,876 | 15,155 |
| **Total funds under management** | **73,428** | **70,962** | **66,906** | **64,271** | **62,113** |
| | | | | | |
| Average Fidante Partners | 54,121 | 52,604 | 50,046 | 47,438 | 45,516 |
| Average Challenger Investment Partners | 16,852 | 16,522 | 15,998 | 15,490 | 14,632 |
| **Total average funds under management[1]** | **70,973** | **69,126** | **66,044** | **62,928** | **60,148** |
| | | | | | |
| **Analysis of flows** | | | | | |
| Equities | (444) | 647 | 809 | (157) | 936 |
| Fixed Income | 770 | 1,491 | 1,161 | 446 | 573 |
| Alternatives | (152) | 185 | 31 | 95 | (50) |
| **Total Fidante Partners** | **174** | **2,323** | **2,001** | **384** | **1,459** |
| Challenger Investment Partners | (2) | 1,439 | (32) | 650 | 835 |
| **Net flows** | **172** | **3,762** | **1,969** | **1,034** | **2,294** |

# Reconciliation of Total Group Assets and Funds Under Management

| $m | Q2 18 | Q1 18 | Q4 17 | Q3 17 | Q2 17 |
|---|---|---|---|---|---|
| Funds Management (FUM) | 73,428 | 70,962 | 66,906 | 64,271 | 62,113 |
| Life investment assets | 17,040 | 16,486 | 15,677 | 14,940 | 14,607 |
| Adjustments to remove double counting of cross holdings | (13,945) | (13,903) | (12,595) | (12,640) | (12,015) |
| **Total Assets Under Management** | **76,523** | **73,545** | **69,988** | **66,571** | **64,705** |

1 Average total funds under management calculated on a monthly basis.

# Funds Management financial results

Challenger's Funds Management business operates both domestically and in Europe, and is one of Australia's fastest growing[1], with FUM more than doubling to $73bn over the last five years.

The Funds Management business benefits from a clear business strategy focused on investor alignment.

Fidante Partners' multi-boutique platform comprises separately branded investment management businesses investing in equities, fixed income and alternatives. The model aligns the interests of investors, boutique investment managers and Fidante Partners.

Funds Management also includes Challenger Investment Partners (CIP), comprising fixed income and property investment teams investing on behalf of third party institutional clients, and Challenger Life.

## EBIT and ROE

Funds Management EBIT was $27m and increased by $6m (31%) on 1H17. The increase in Funds Management EBIT, was due to higher net income (up 10%), partially offset by a marginal (less than 1%) increase in expenses.

1H18 Funds Management ROE was 27.6%, and increased by 440 bps from 23.2% in 1H17. 1H18 ROE benefitted from higher EBIT (up 31%), partially offset by a 10% increase in average net assets. Average net assets increased due to higher cash earnings, increased investments in boutiques and the establishment of the Japanese office.

## Total net fee income

1H18 net income was $72m and increased by $7m (10%) on 1H17. Net fee income increased as a result of higher average FUM (up 20%) and higher Fidante Partner's performance fees (up $5m). Partially offsetting the benefit of higher FUM and performance fees were lower Fidante Partners Europe transaction fees (down $8m) in respect of capital raisings (refer to page 46 for more detail on Fidante Partners Europe) and changes in FUM mix.

## Expenses

1H18 Funds Management expenses were $45m, and increased by 1% on 1H17. Personnel expenses decreased by $2m, with higher FTE numbers more than offset by lower recruitment and bonus expenses. Other expenses increased by $2m due to increased investment in marketing and advertising.

The 1H18 cost to income ratio was 62.4%, down 590 bps from 68.3% in 1H17.

## Fidante Partners net income

Fidante Partners' net fee income includes distribution fees, administration fees, transaction fees from Fidante Partners Europe, performance fees and a share in the equity accounted profits of boutique investment managers.

Fidante Partners' net income was $43m in 1H18, up $2m (6%) from 1H17. Fidante Partners' net income increased as a result of higher average FUM (up 21%), higher performance fees (up $5m), partially offset by lower transaction fees from Fidante Partners' Europe capital raising (down $8m) as a result of variable market activity.

Fidante Partners' 1H18 income margin (net income to average FUM) was 16 bps, down 2 bps from 1H17. The decrease in net income margin was due to:

- higher performance fees (+2 bps); offset by
- lower Fidante Partners Europe capital raising transaction fees (-4bps).

## Fidante Partners FUM and net flows

Fidante Partners' FUM at 31 December 2017 (1H18) was $56.0bn, and increased by $5.0bn (10%) in 1H18. The increase in Fidante Partners FUM in 1H18 was due to:

- strong net flows of +$2.5bn; and
- positive investment markets net of distributions of +$2.5bn.

Fidante Partners' 1H18 FUM is invested in the following asset classes:

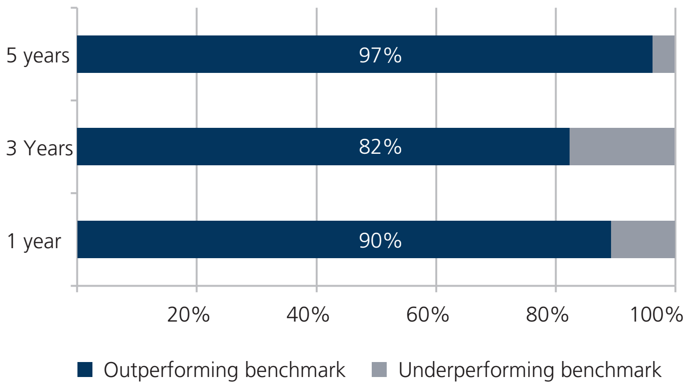
- 43% in equities, down 1% from 1H17;
- 43% in fixed income and up 1% from 1H17; and
- 14% in alternatives and unchanged from 1H17.

## Fidante Partners investment performance

Fidante Partners investment performance represents the percentage of FUM meeting or exceeding performance benchmarks.

Fidante Partners investment performance has remained strong. Over a one year period, 90% of funds have exceeded benchmark and over five years, 97% have exceeded benchmark[2].

Total investment performance is weighted by boutique FUM.




1 Consolidated FUM for Australian fund managers – Rainmaker Roundup September 2017.
2 Percentage of Fidante Partners' funds meeting or exceeding performance benchmarks over one and five years weighed by FUM.

## Fidante Partners Europe

Fidante Partners includes a European alternative investments group comprising interests in a number of specialist fund managers, as well as a capital raising business serving the needs of listed, closed-end alternative investment companies.

Fidante Partners Europe is an important part of Funds Management's international distribution and product expansion. It provides a scalable platform to replicate Fidante Partners' multi-boutique platform in Europe and is helping to attract high quality fund managers.

In February 2018, Challenger announced a new boutique partnership with Garelick Capital Partners. Garelick Capital Partners is an equity hedge fund based in Boston and will form part of Fidante Partners Europe.

## Challenger Investment Partners net income

Challenger Investment Partners' net income was $29m in 1H18, up $4m (18%) on 1H17 from higher average FUM.

Challenger Investment Partners' 1H18 income margin (net income to average FUM) was 34 bps and was unchanged from 1H17. The 1H18 income margin benefited from higher third party property leasing and fixed income fees, offset by higher Life fixed income mandates, which are lower margin. Life fixed income mandates managed by Challenger Investment Partners increased by $1.6bn from 1H17 and represent 56% of CIP's 1H18 FUM, up from 53% in 1H17.

## Challenger Investment Partners' FUM and net flows

Challenger Investment Partners' FUM at 31 December 2017 was $17.4bn, and increased by $1.5bn (9%) in 1H18. The increase in Challenger Investment Partners' FUM was due to net flows of $1.4bn and positive market movement of $0.1bn.

Challenger Investment Partners 1H18 FUM is invested in the following asset classes:

- 71% in fixed income, up 2% from 1H17; and
- 29% in property, down 2% from 1H17.

# Corporate financial results

| $m | 1H18 | 2H17 | 1H17 | 2H16 | 1H16 |
|---|---|---|---|---|---|
| **Other income** | **0.5** | **0.4** | **0.4** | **0.4** | **0.6** |
| Personnel expenses | (20.1) | (20.7) | (17.8) | (19.1) | (18.0) |
| Other expenses | (5.8) | (6.1) | (5.8) | (6.6) | (6.4) |
| **Total expenses (excluding LTI)** | **(25.9)** | **(26.8)** | **(23.6)** | **(25.7)** | **(24.4)** |
| Long-term incentives (LTI) | (7.2) | (8.3) | (8.1) | (8.6) | (8.0) |
| **Total expenses** | **(33.1)** | **(35.1)** | **(31.7)** | **(34.3)** | **(32.4)** |
| **Normalised EBIT** | **(32.6)** | **(34.7)** | **(31.3)** | **(33.9)** | **(31.8)** |
| Interest and borrowing costs | (2.9) | (3.0) | (2.3) | (1.8) | (2.3) |
| **Normalised loss before tax** | **(35.5)** | **(37.7)** | **(33.6)** | **(35.7)** | **(34.1)** |

The Corporate division comprises central functions such as group executives, finance, treasury, legal, human resources, risk management and strategy.

Corporate also includes interest received on Group cash balances and any interest and borrowing costs associated with Group debt facilities.

## Normalised EBIT

Corporate normalised EBIT was a loss of $33m in 1H18, down $2m on 1H17 due to higher expenses.

## Other income

1H18 other income increased slightly on 1H17 to $1m, reflecting interest received on Group cash balances. Group cash at 31 December 2017 was $122m and increased by $41m from 31 December 2016.

## Total expenses

1H18 Corporate expenses were $33m, and increased by $1m on 1H17.

1H18 Corporate expenses include personnel costs of $20m, which were up $2m on 1H17 as a result of an increase in employees. Long-term incentive costs relate to the non-cash amortisation of equity grants and decreased by $1m in 1H18.

## Interest and borrowing costs

1H18 interest and borrowing costs relate to debt facility fees on the Group's banking facility. 1H18 interest and borrowing costs were $3m and increased by $0.6m on 1H17.

The Group maintains a $400m banking facility in order to provide additional financial flexibility. The Group banking facility was undrawn as at 31 December 2017.

# Normalised cash operating earnings framework

Life normalised cash operating earnings is Challenger's preferred profitability measure for the Life business, as it aims to reflect the underlying performance trends of the Life business.

The Life normalised cash operating earnings framework was introduced in June 2008 and has been applied consistently since.

The framework removes the impact of market and economic variables, which are generally non-cash and a result of external market factors. The normalised profit framework is subject to a review performed by Ernst & Young each half year.

Life normalised cash operating earnings includes cash earnings plus normalised capital growth, but excludes investment experience (refer below).

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**Cash earnings**

Cash earnings represents investment yield, less interest expenses and distribution expenses.

**Investment yield**

Represents the investment return on assets held to match annuities and the return on shareholder investment assets.

Investment yield includes net rental income, dividends received, infrastructure distributions, accrued interest on fixed income and cash, and discounts/premiums on fixed income assets amortised on a straight line basis.

**Interest expense**

Represents interest accrued at contracted rates to annuitants and Life subordinated debt holders and other debt holders.

**Distribution expenses**

Represents payments made for the acquisition and management of Life products, including annuities.

**Other income**

Other income includes revenue from Accurium and profits on Life Risk wholesale longevity and mortality transactions (refer to page 20).

**Normalised capital growth**

Normalised capital growth represents the expected capital growth for each asset class through the investment cycle and is based on Challenger's long-term expected investment returns for each asset class.

Normalised capital growth can be determined by multiplying the normalised capital growth assumption (see below) by each asset class average balance for the period (net of debt).

Normalised capital growth assumptions for 1H18 are as follows:

- Fixed income and cash – negative 0.35% representing an allowance for credit defaults;
- Property – 2.00%;
- Infrastructure – 4.00%; and
- Equity and alternative asset classes – 4.50%.

Normalised capital growth assumptions have been set with reference to long-term market growth rates and are reviewed regularly to ensure consistency with prevailing medium to long-term market returns.

**Investment experience**

Challenger Life is required by accounting standards and prudential standards to value all assets and liabilities supporting the Life business at fair value. This gives rise to fluctuating valuation movements on assets and liabilities being recognised in the profit and loss, particularly during periods of market volatility. As Challenger is generally a long-term holder of assets, due to them being held to match the term of life liabilities, Challenger takes a long-term view of the expected capital growth of the portfolio rather than focusing on short-term movements.

Investment experience is a mechanism employed to remove the volatility arising from asset and liability valuation movements from Life business earnings so as to more accurately reflect the underlying performance of the Life business.

The asset and liability valuation movements are reported as investment experience. These movements are generally non-cash, and by separating them from the Life business result, Life's reported earnings more closely represent the cash earnings of the business.

**Impact from economic variables**

Investment experience also includes the impact of changes in macroeconomic variables on the valuation of Life's assets and liabilities. Economic and actuarial assumption changes include changes to bond yields and inflation factors, expense assumptions, losses on new business and other factors applied in the valuation of life contract liabilities.

Investment experience is calculated as the difference between actual investment gains/losses (both realised and unrealised) and the normalised capital growth plus any economic and actuarial assumption changes for the period.

# Glossary of terms

| Terms | Definitions |
|---|---|
| **Additional Tier 1 regulatory capital** | High quality capital that provides a permanent and unrestricted commitment and is freely available to absorb losses but does not satisfy all the criteria to be included in Common Equity Tier 1 regulatory capital. |
| **Cash earnings (Life)** | Investment yield and other income less interest and distribution expenses. |
| **CET1 ratio** | Common Equity Tier 1 regulatory capital divided by prescribed capital amount. |
| **CIP income** | CIP income includes asset based management fees, and other income such as leasing fees, acquisition and disposal fees, development and placement fees. |
| **Common Equity Tier 1 regulatory capital** | The highest quality capital comprising items such as paid-up ordinary shares and retained earnings. Common equity tier 1 capital is subject to certain regulatory adjustments in respect of intangibles and adjusting policy liabilities. |
| **Earnings per share** | Net profit after tax divided by weighted average number of shares in the period. |
| **Distribution expenses (Life)** | Payments made for the acquisition and management of annuities and other Life products. |
| **Fidante Partners' income (FM)** | Distribution and administration fees; Fidante Partners share of boutique manager profits; and other income from boutique investment managers. |
| **Funds under management (FUM)** | Total value of listed and unlisted funds/mandates managed by the Funds Management business. |
| **Group assets under management** | Total value of Life's investment assets and Funds Management FUM. |
| **Group cash** | Cash available to Group excluding cash held by Challenger Life Company Limited. |
| **Interest and borrowing costs (Corporate)** | Interest and borrowing costs associated with group debt and group debt facilities. |
| **Interest expenses (Life)** | Interest accrued and paid to annuitants, subordinated debt note holders and other debt providers (including Challenger Capital Notes). |
| **Investment experience (Life)** | The difference between actual investment gains/losses (both unrealised and realised) and the normalised capital growth assumption plus any economic and actuarial assumption changes for the period. |
| **Investment yield (Life)** | Net rental income, dividends received and accrued interest and discounts/premiums on fixed income securities amortised on a straight line basis. |
| **Investment yield – shareholder funds (Life)** | Represents the return on shareholder capital held by the Life business. |
| **Life investment assets** | Total value of investment assets that are managed by the Life business. |
| **Life annuity book growth** | Net annuity policy capital receipts over the period divided by the opening policy liabilities (Life annuity book). |
| **Life book growth** | Net annuity and other policy capital receipts over the period divided by the opening policy liabilities (Life annuity book, Guaranteed Index Return liabilities and Challenger Index Plus Fund liabilities). |
| **Net annuity policy receipts** | Life retail annuity sales less annuity capital payments. |
| **Net assets – average (Group)** | Average net assets over the period (excluding non-controlling interests) calculated on a monthly basis. |
| **Net fee income (FM)** | Fidante Partners' income, performance fees (FM), Challenger Investment Partners' income and performance fees. |
| **Net management fees (FM)** | Management fees for managing investments. |
| **Net tangible assets** | Consolidated net assets less goodwill and intangibles. |
| **Net Interest Margin (NIM)** | Net interest margin on term funded prime mortgages and included as part of Life's investment assets. |
| **New business tenor** | Represents the maximum product maturity of new business sales. These products may amortise over this period. |
| **Normalised capital growth** | Long-term expected capital growth based on long-term return assumptions calculated as long-term capital growth assumption multiplied by average investment assets. |

# Glossary of terms

| Terms | Definitions |
|---|---|
| **Normalised Cash Operating Earnings (NCOE) (Life)** | Cash earnings plus normalised capital growth. |
| **Normalised cost to income ratio** | Total expenses divided by total net income. |
| **Normalised dividend payout ratio** | Dividend per share divided by normalised earnings per share (basic). |
| **Normalised EBIT (Life)** | Normalised cash operating earnings less total Life expenses. |
| **Normalised EBIT (FM)** | Net income less total expenses. |
| **Normalised effective tax rate** | Normalised tax divided by normalised profit before tax. |
| **Normalised Return on Equity (ROE) – pre-tax** | Normalised Life EBIT and FM EBIT or Normalised NPBT (Group) divided by average net assets. |
| **Normalised Return on Equity (ROE) – post-tax** | Group's normalised NPAT divided by average net assets. |
| **Other expenses** | Non-employee expenses, including external professional services, occupancy costs, marketing and advertising, travel, technology and communications costs. |
| **Other income (Corporate)** | Includes interest received on Group cash balances. |
| **Other income (Life)** | Relates to Accurium revenue and Life Risk. Refer to page 20 for more detail. |
| **Performance fees (FM)** | Fees earned for outperforming benchmarks. |
| **Personnel expenses** | Includes fixed and short-term variable incentive components of remuneration structures. The amortisation of long-term incentive plans is reported separately within the Corporate results. |
| **PCA ratio** | The ratio of the total CLC Tier 1 and Tier 2 regulatory capital base divided by the prescribed capital amount. |
| **Prescribed capital amount (PCA)** | Amount of capital that a life company must hold which is intended to be sufficient to withstand a 1 in 200 year shock and still meet adjusted policy liabilities and other liabilities. For further details refer to APRA's LPS110 Capital Adequacy. |
| **Product cash margin (Life)** | Represents the return on assets backing annuities and other income, less interest and distribution expenses. |
| **Significant items** | Non-recurring or abnormal income or expense items. |
| **Statutory Return on Equity (ROE) – post-tax** | Statutory NPAT divided by average net assets. |
| **Tier 1 regulatory capital** | Tier 1 regulatory capital comprises Common Equity Tier 1 regulatory capital and Additional Tier 1 regulatory capital. |
| **Tier 2 regulatory capital** | Tier 2 regulatory capital contributes to the overall strength of a Life company and its capacity to absorb losses but does not satisfy all the criteria to be included as Tier 1 regulatory capital. |
| **Total expenses** | Personnel expenses plus other expenses. |
| **Total net income** | Normalised Cash Operating Earnings (Life) plus net fee income (FM) plus other income (Corporate). |

# Key dates

| Challenger Limited (CGF) | |
|---|---|
| **Q318 Sales and AUM** | 19 April 2018 |
| **2018 Investor Day** | 19 June 2018 |
| **2018 Full year results** | 14 August 2018 |
| **Q119 Sales and AUM** | 16 October 2018 |
| **2018 Annual General Meeting** | 26 October 2018 |

| Challenger (CGF) Interim dividend 2018 | |
|---|---|
| **Ex-dividend date** | 27 February 2018 |
| **Record date** | 28 February 2018 |
| **DRP election date** | 1 March 2018 |
| **Payment date** | 27 March 2018 |

| Challenger (CGF) Final dividend 2018 | |
|---|---|
| **Ex-dividend date** | 31 August 2018 |
| **Record date** | 3 September 2018 |
| **DRP election date** | 4 September 2018 |
| **Payment date** | 26 September 2018 |

challenger

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