# Experience of Term Assurances in Ireland 2015-2021 Summary of Society of Actuaries in Ireland and Continuous Mortality Investigation Working Paper 199

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**Disclaimer:** The summary results contained in this document have been provided for information purposes only. Any person or body wishing to rely on these figures should refer to Working Paper 199 to understand the reliances and limitations of this study.

#### 1. Overview

The Society of Actuaries in Ireland (SAI) and the Continuous Mortality Investigation (CMI) of the Institute & Faculty of Actuaries (IFoA), UK have jointly completed an investigation into the experience of term assurances in Ireland over the period 2015-2021. The investigation considered, for term assurances sold on standard rates, the mortality experience for 2016-2021 and the accelerated critical illness and stand-alone critical illness experience for 2015-2021. Experience from 2015/2016-2019 was considered in aggregate while experience for the pandemic years 2020 and 2021 was considered individually to allow assessment of the impact of the pandemic on experience. The SAI and CMI would like to thank the participating insurance companies who provided the data underlying this investigation.

Results of the investigation are presented in CMI Working Paper 199 published in May 2025, and the paper and accompanying spreadsheet of results can be obtained <a href="https://example.com/here">here</a>. The paper and spreadsheet are available to CMI Authorised Users (i.e. to employees of subscribers and to researchers, for non-commercial use). Results are presented on an Actual/Expected basis relative to the CMI "16" Series term assurance tables (CMI Working Paper 154). The methodology and results format for the mortality and accelerated critical illness analysis are broadly consistent with those used for the corresponding UK analysis in CMI Working Paper 191 except that where mortality trends are allowed for, these are calibrated to Irish population data in line with CMI Working Paper 141. Stand-alone critical illness results use a methodology consistent with the accelerated critical illness methodology.

For comparison, high level results are compared with the mortality and accelerated critical illness results for UK term assurances presented in CMI Working Paper 191 covering the period 2016-2022. Working Paper 191 did not include an analysis of stand-alone critical illness business hence no comparisons with corresponding UK results were possible. No comparison was carried out with the results of the 2009-2015 SAI Irish Insured Lives Mortality Investigation (SAI 2019) as the 2019 paper covered both term and whole of life assurances, covered an earlier, non-overlapping period, presented results relative to older base tables and, in contrast to this analysis, did not include an allowance for IBNR.

The investigation involved one-way analyses of experience by the following factors for males and females respectively: age, duration, sum assured band distribution channel, product type, commencement years, single/joint life status, conversion option and calendar year. Due to data limitations, not all factors were analysed for each category of business. The main results for each business category are summarised in the following section.

#### 2. Summary Results

### Mortality

The overall experience from 2016-2019 and in 2021 is approximately 1-2% heavier than expected by the T16 tables. In contrast, experience in 2020 is approximately 4% lighter than expected. When analysed by gender and smoker status a similar pattern can be seen, with the 2021 experience generally consistent with the pre-pandemic period (2016-2019) while the 2020 experience is generally lighter than other periods. The lighter experience seen in 2020 relative to 2021 is consistent with that seen in the Irish population in a previous report by the SAI on excess mortality in Ireland during the COVID-19 pandemic (SAI 2024). When trends are taken into account, the overall experience for all periods is heavier than expected by the T16 tables.

#### **Accelerated Critical Illness**

The overall experience is around 6-8% heavier than is expected by the AC16 tables in 2015-2019 and 2021, but 2020 experience was around 6% lighter than expected. The A/Es for males are typically higher than 100%; the A/Es for females are lower and for the smoker category in particular generally below 100%. For both male and female non-smokers, experience in 2021 was broadly consistent with the pre-pandemic experience (2015-2019) but experience in 2020 was around 15% lighter. Female smoker experience showed a similar lightening in 2020 with a partial rebound in 2021. Male smokers showed a different pattern with heavier experience in 2020 relative to the 2015-2019 period followed by a significant lightening in 2021.

#### **Standalone Critical Illness**

The overall 2015-2019 experience is heavier than expected by the AC16 tables but both 2020 and 2021 experience is close to expected, with 2020 having lighter experience than expected. For all gender and smoker statuses, 2020 experience is lighter than the 2015-2019 pre-pandemic experience but 2021 experience differed between genders. On a lives-weighted basis, male experience in 2021 is equal to or lighter than 2020 experience whereas female experience in 2021 was heavier than the corresponding experience in 2020, and for female smokers it is also heavier than the 2015-2019 experience.

#### 3. Future Work

The SAI Demography Committee undertakes analyses of Irish population and insured lives mortality and morbidity experience and this is the first analysis of Irish experience undertaken jointly by the SAI and CMI. Previous joint work between the SAI Demography Committee and the CMI was in respect of the calibration of the CMI Mortality Projections Model for Irish population data (SAI 2020). Further collaboration of this sort will depend on the level of interest and response received in respect of the investigation and the availability of CMI resources in the future.

Comments or questions in respect of this summary are welcome and can be sent to: <u>info@actuaries.ie</u>.

#### References

## **CMI Working Papers**

- CMI Working Paper 199: Experience of term assurances in Ireland 2015-2021 (2025)
- CMI Working Paper 141: Calibration of the CMI model for Ireland (2020)
- CMI Working Paper 154: Final "16" Series term assurance mortality and accelerated critical illness tables (2021)
- CMI Working Paper 191: Experience of term assurances in 2022 (2024)

All of these papers can be accessed and downloaded from the Institute and Faculty of Actuaries' website: <a href="https://www.actuaries.org.uk/learn-and-develop/continuous-mortality-investigation-cmi-ltd/cmi-working-papers">https://www.actuaries.org.uk/learn-and-develop/continuous-mortality-investigation-cmi-ltd/cmi-working-papers</a>; most are only accessible to Authorised Users (i.e. to employees of subscribers and to researchers, for non-commercial use).

## **Society of Actuaries in Ireland Papers**

- SAI 2019: Irish Insured Lives Mortality Investigation. Society of Actuaries in Ireland. February 2019. SAI IILMI Report
- SAI 2024: The Level of Excess Mortality in Ireland during the Covid-19 pandemic 2020 & 2021. Society of Actuaries in Ireland. June 2024. <u>SAI Excess Mortality Report</u>