



Retirement

National Fund for Municipal Workers

Statutory valuation as
at 30 June 2022 &
Self-insurance rates

June 2023



Introduction



● ● Main purposes of the valuation

Investigate & report on financial soundness

Development of contingency reserve accounts

Self-funding of lump sum death and disability benefits

Sustainability of living annuitants' drawdown rates



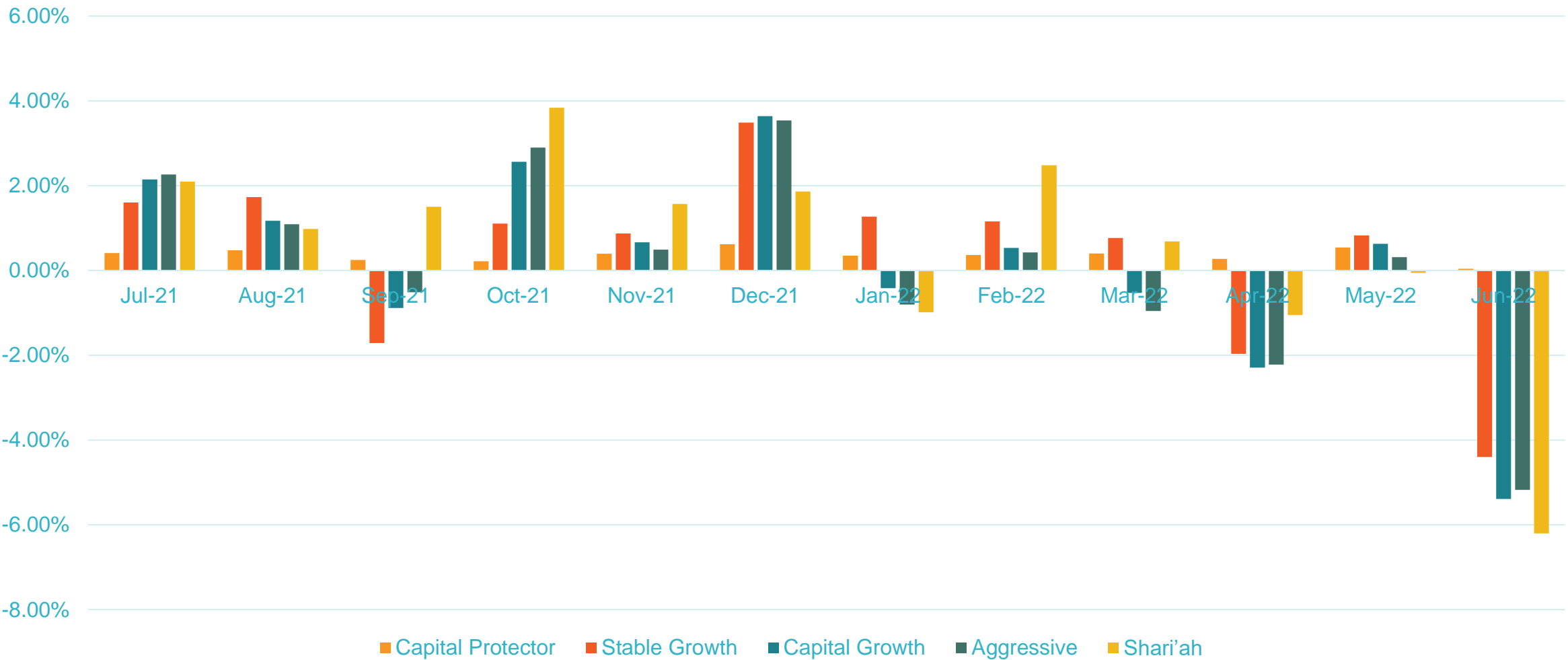
This is a **STATUTORY** report → due for submission by 30 June 2023

● Rule amendments

- Rule amendment 7: Subsidisation of risk premiums from risk reserve
- Rule amendment 8 & 9: Provision for conditions of “collective agreement”
- Rule amendment 10: Self-insurance of risk benefits with effect from 1 July 2022



Returns allocated via daily unitisation process

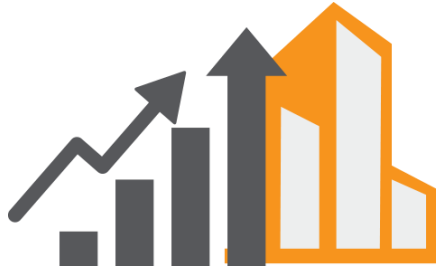




Valuation Methodology



Recap of the valuation methodology



Assets

- Taken at 100% of market value: no deliberate margins
- Audited financial statements
- Actuarial adjustments



Member Liabilities

- Contributing members
 - ✓ DC basis
- Deferred members
 - ✓ DC basis
- Living annuitants
 - ✓ DC basis
 - ✓ Sustainability

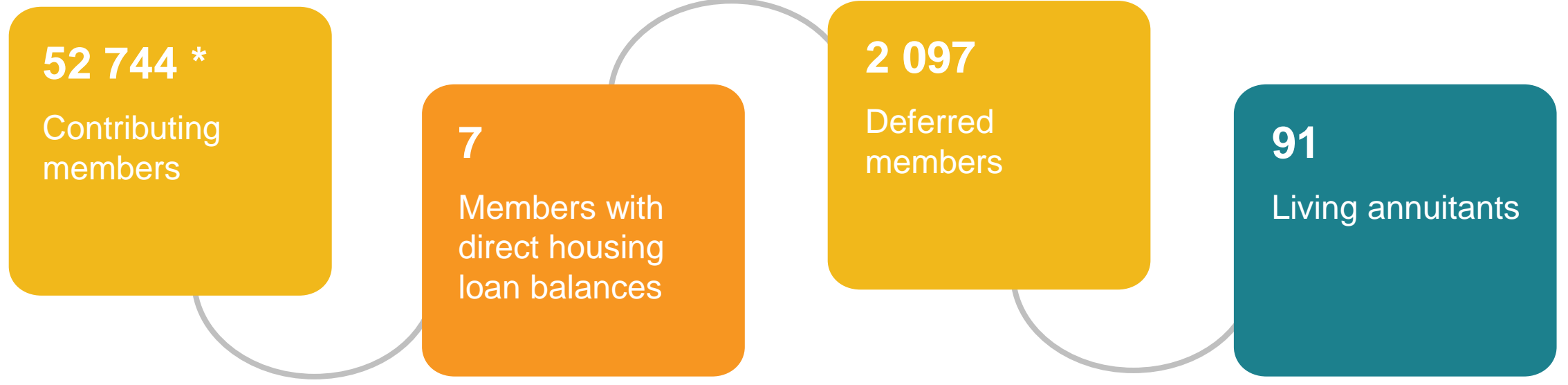


Reserve accounts

- Risk Reserve
- Expense Reserve
- Data and Processing Error Reserve



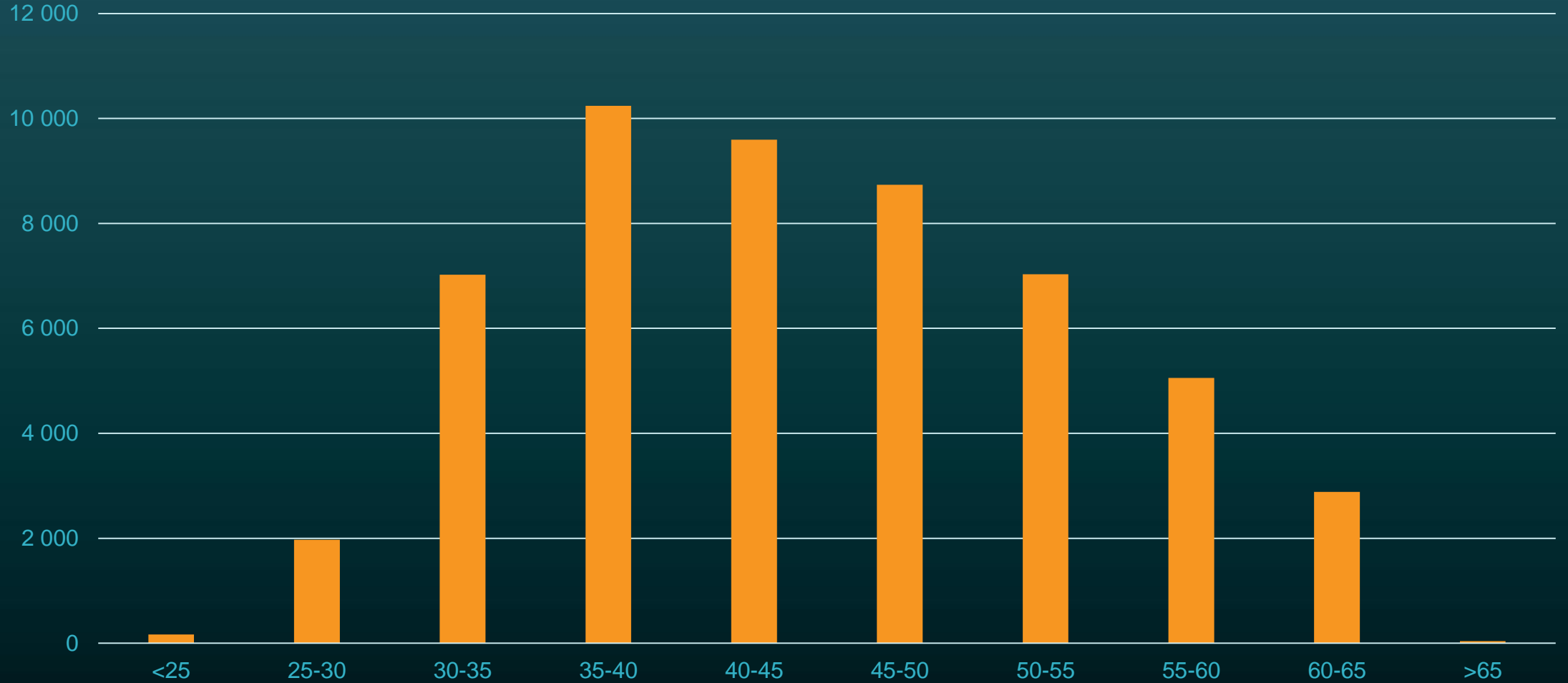
Membership



* Category B members have both a Category A and Category C record. Counted as “2 members” per the valuation data received.



Contributing members | Age distribution | Number

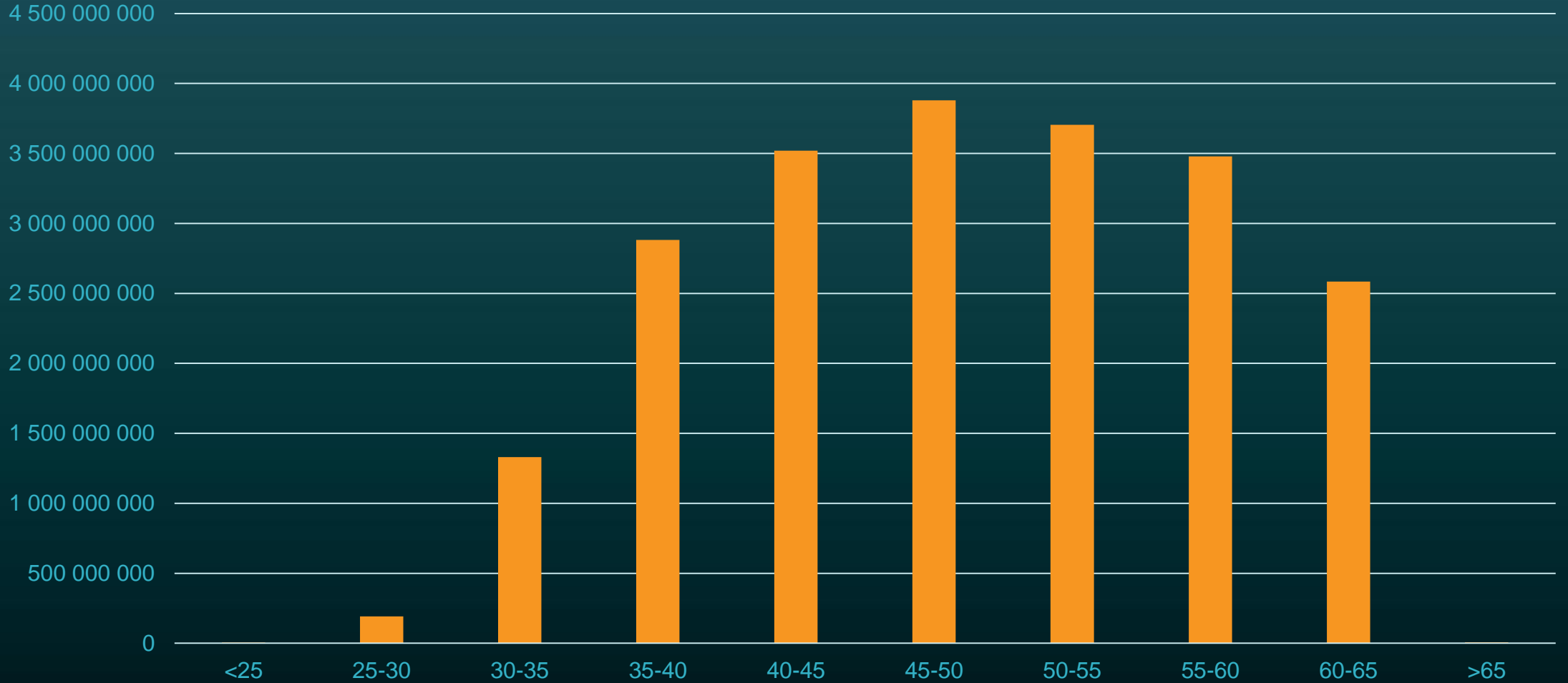


Number: 52 744

Average age: 44.3 years



Contributing members | Age distribution | Fund credits

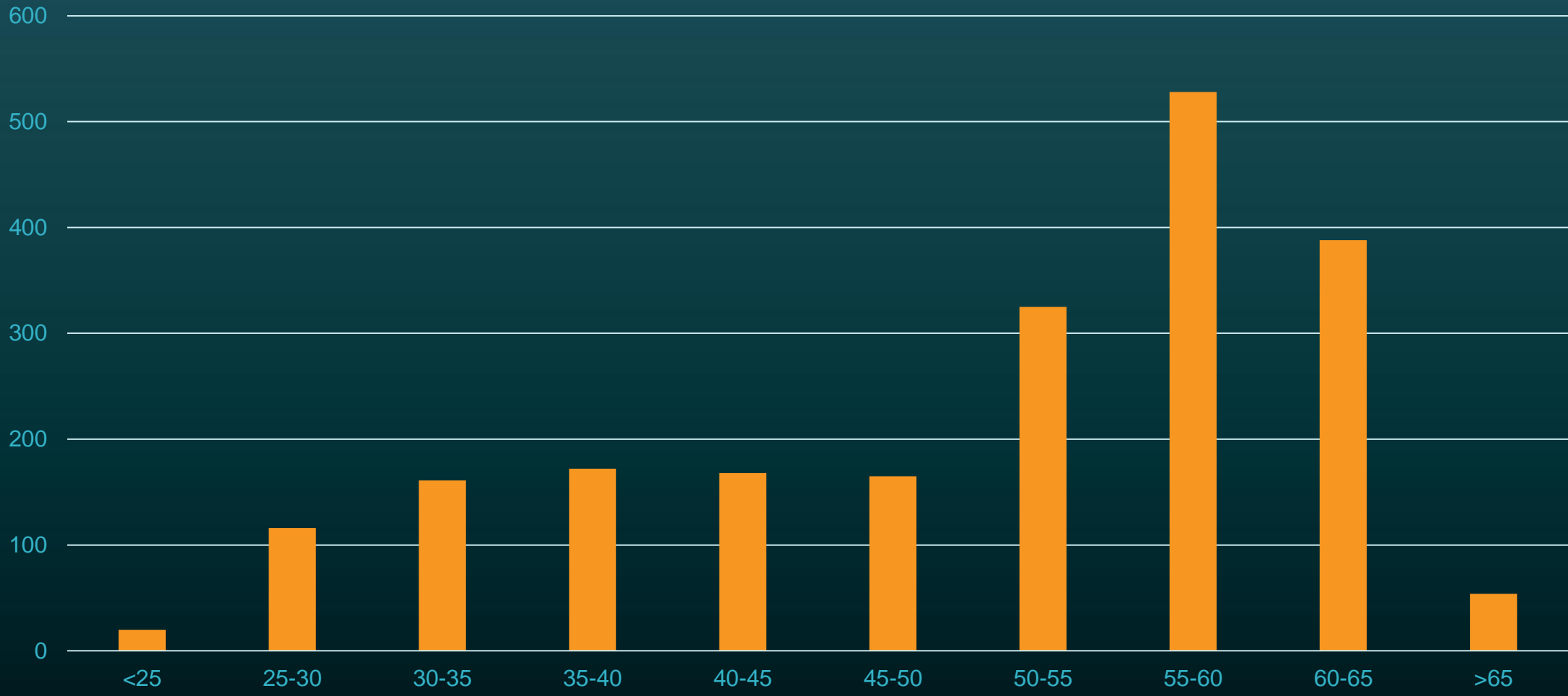


Number: 52 744

Average fund credit: R 411 331



Deferred members | Age distribution | Number

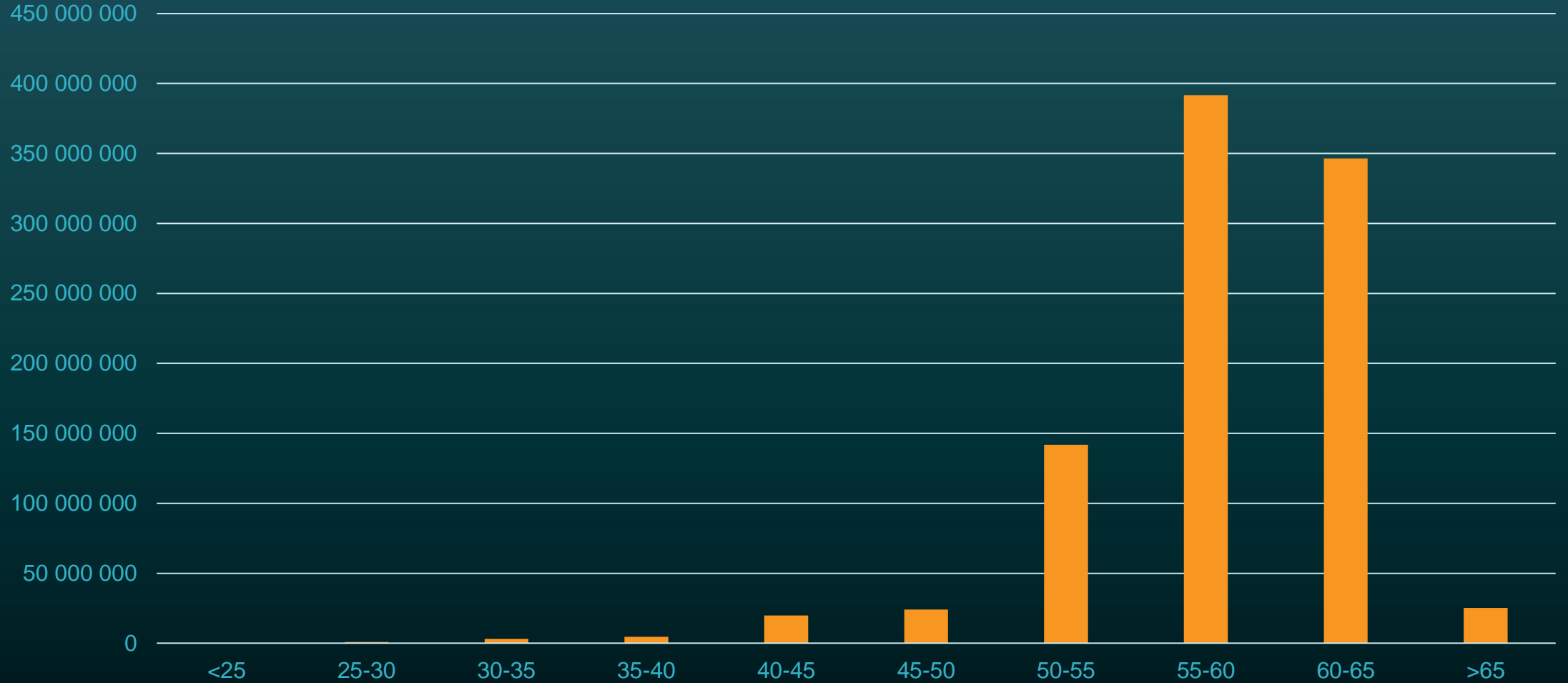


Number: 2 097

Average age: 50.4 years



Deferred members | Age distribution | Fund credits

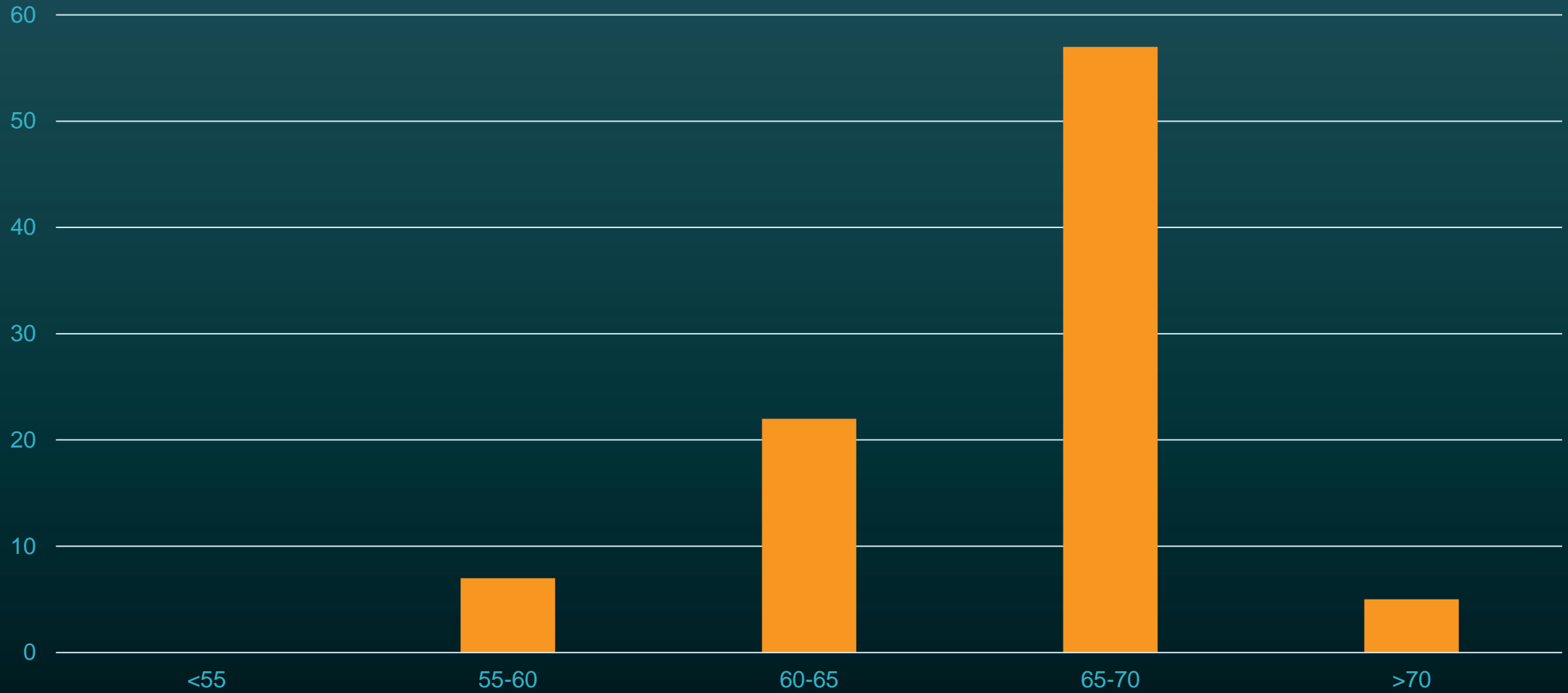


Number: 2 097

Average fund credit: R 456 714



Living annuitants | Age distribution | Number

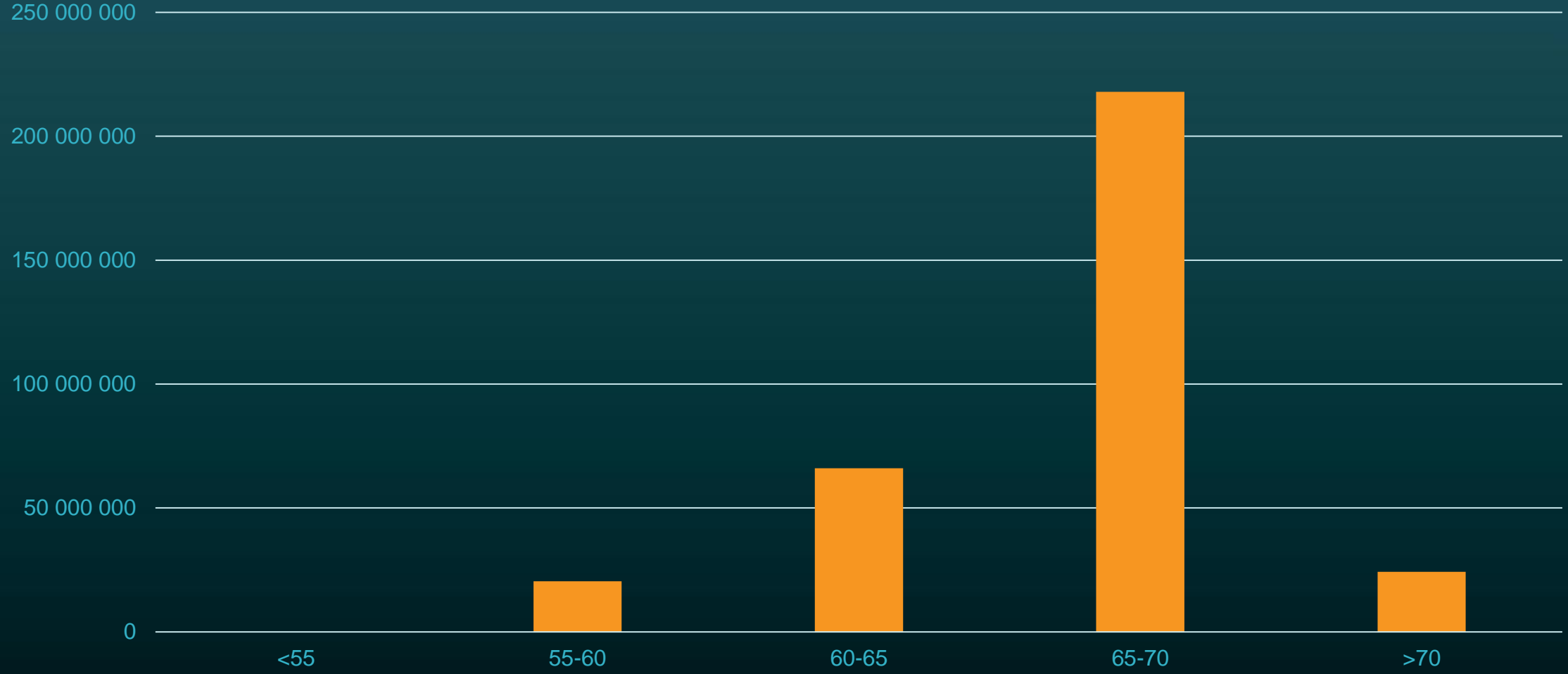


Number: 91

Average age: 66.0 years



Living annuitants | Age distribution | Account balances

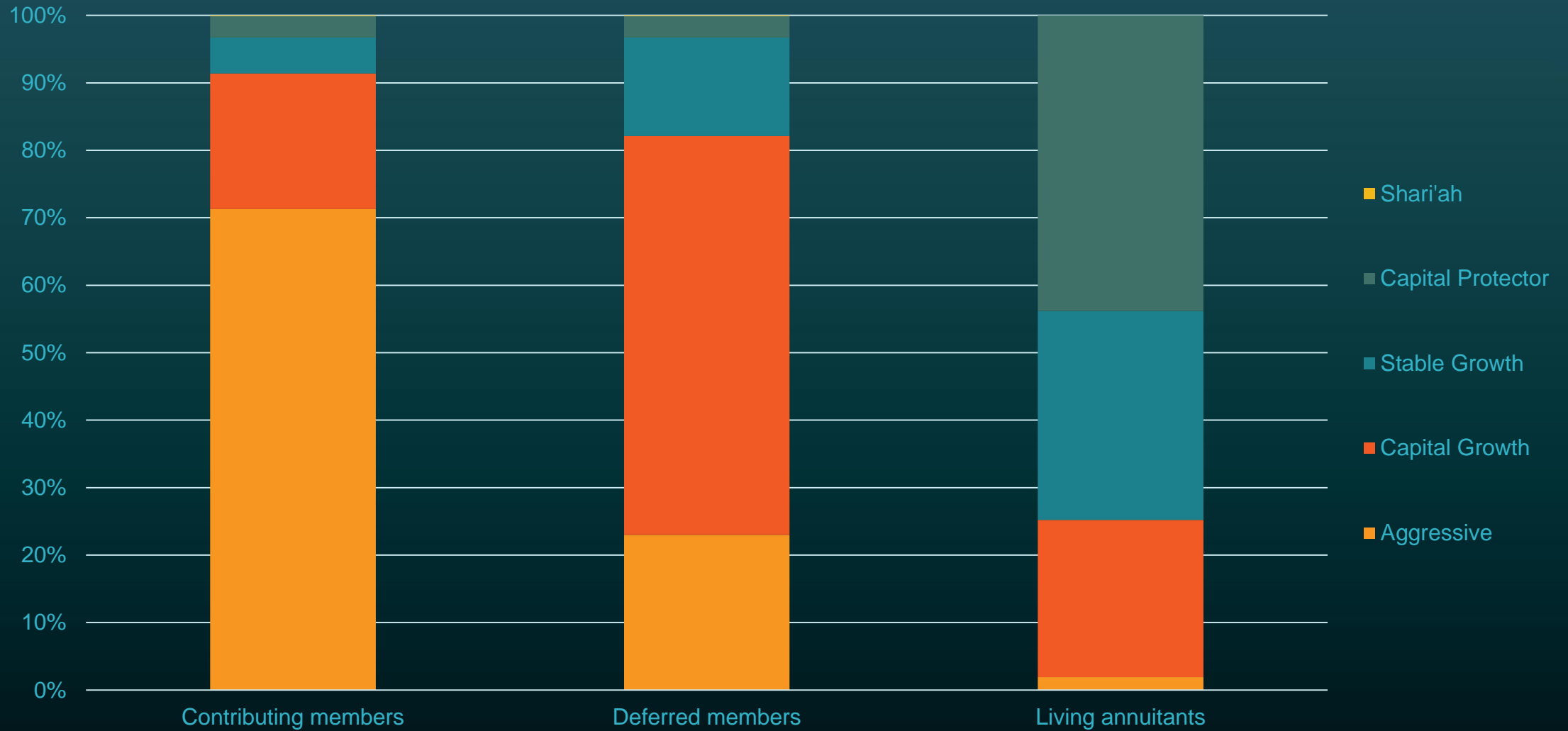


Number: 91

Average age: 66.0 years



Fund credits | Distribution between investment portfolios





Data checks



Reconciliation of membership: last year to this year



Checks on salary changes & risk premium and expense deductions



Check on exits

- Retirements, deaths, disabilities, withdrawals
- Cross-reference exits in member data to the financials
- Findings: Actuarial adjustments made to assets
 - ✓ Under-provision for benefit payments (R 114 million)

Contributing members | Build-up



	2020-2021	2021-2022
Contributing members: Start of period	51 649	52 201
New entrants	2 544	3 143
Withdrawals	(484)	(1 003)
Retirements	(671)	(802)
Deaths <i>(self-insured from 1 July 2022)</i>	(644)	➔ (420)
Disabilities <i>(self-insured from 1 July 2022)</i>	(25)	➔ (43)
Transferred to deferred members	(147)	(326)
Other (consolidation of duplicate records)	(21)	(6)
Contributing members: End of period	52 201	52 744



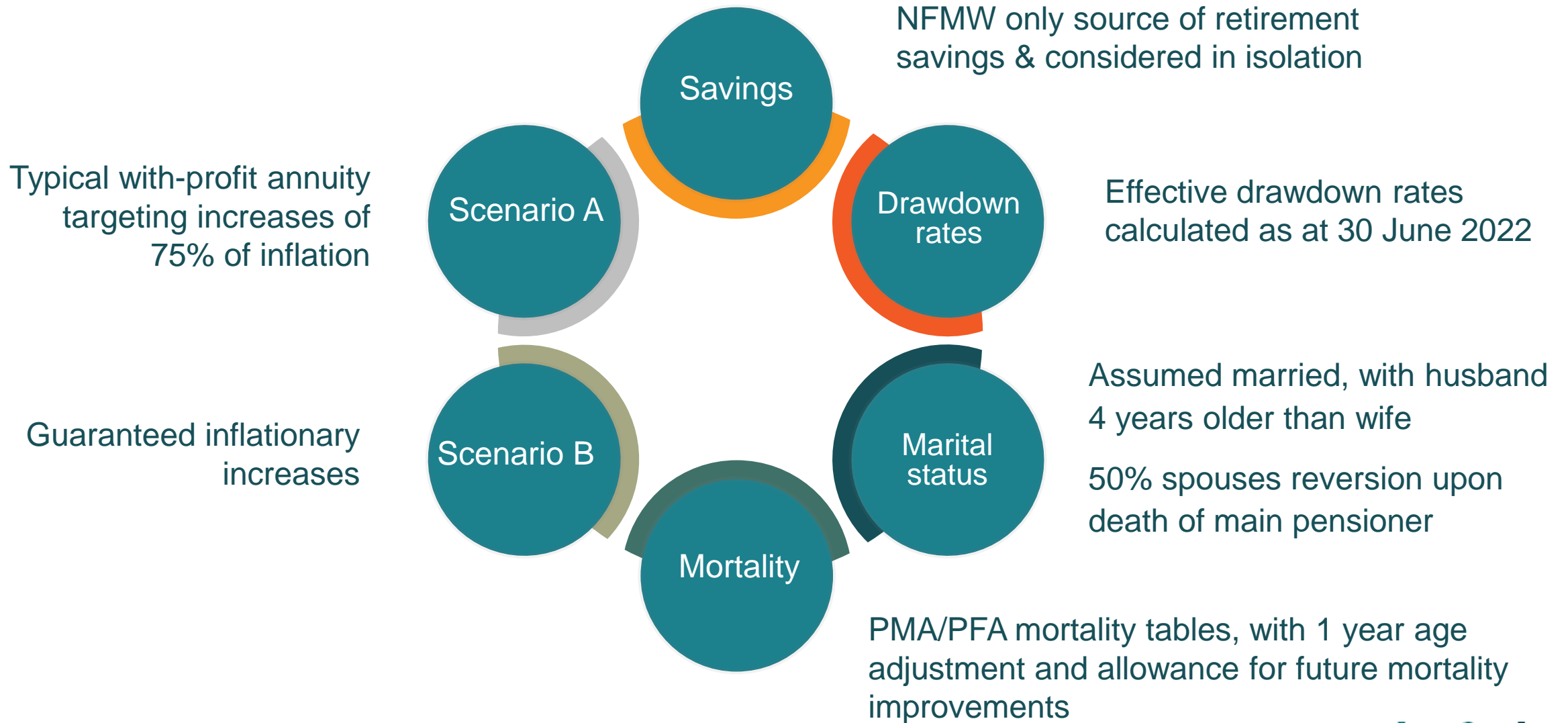
Living Annuities | Sustainability check



- **91** living annuitants
- Fund decided to “close” in-fund living annuity option and transfer remaining living annuitants → number of annuitants expected to reduce
- Living Annuity Capital Account = sum individual living annuity accounts = **R 328 million**
- Regulation 39 requires the fund to monitor the **sustainability** of the income drawn by the in-fund living annuitants
- Living annuitants bear investment & longevity risks



Sustainability check | Assumptions



Sustainability check | Results

Number of living annuities with actual drawdown rates deemed NOT sustainable

	Number	Minimum drawdown	Maximum drawdown	A	B
< 55	-	-	-	-	-
55 - 59	7	5.5%	6.5%	-	7
60 – 64	22	3.5%	6.6%	-	20
65 – 69	57	2.5%	7.8%	-	11
>= 70	5	4.8%	6.7%	-	-
Totals	91	2.5%	7.8%	-	38



Valuation results & recommendations



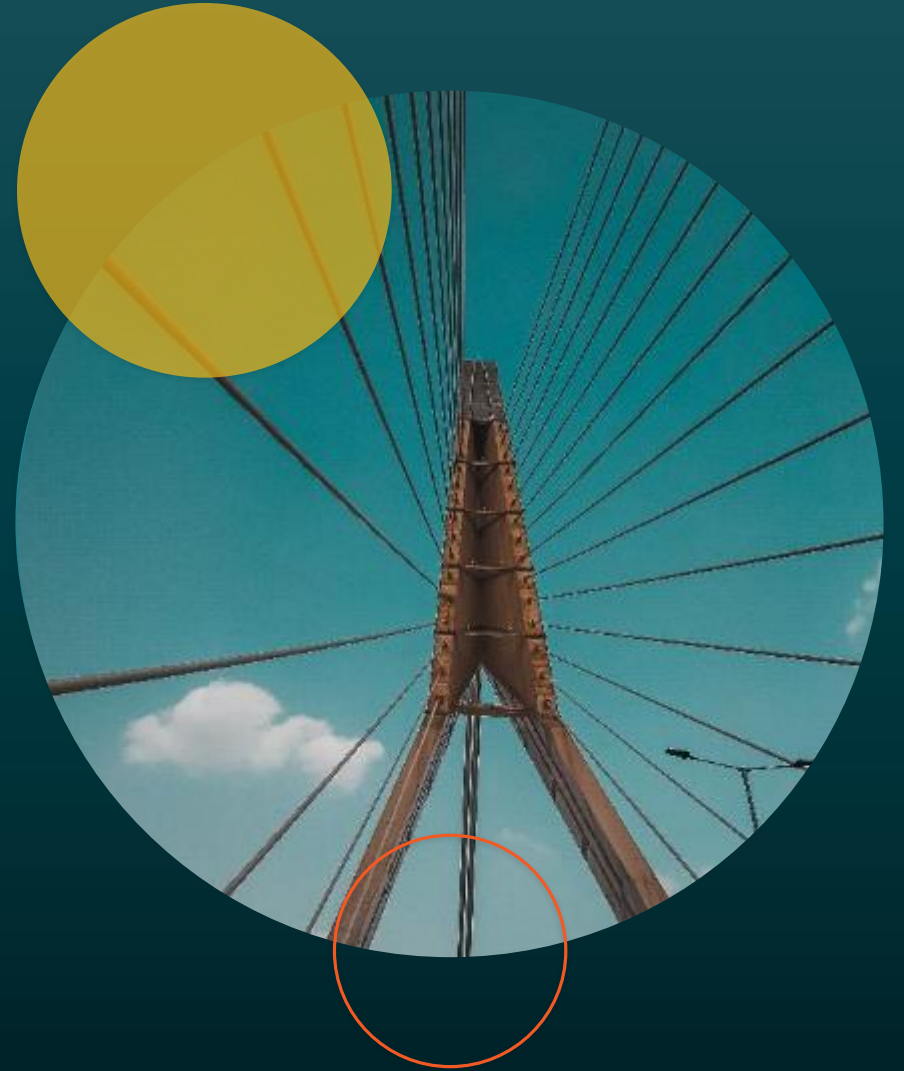
Valuation Results | Summary

Amounts in R'million	30 Jun 2021 (after board decisions)	30 Jun 2022
Value of assets	R 22 598 m	R 23 161 m
Member liabilities	R 22 131 m	R 23 054 m
Contributing members	20 518 m	21 585 m
Contributions allocated after year-end	191 m	182 m
Direct housing loans	1 m	1 m
Deferred members	1 032 m	958 m
Living annuitants	389 m	328 m
Reserve accounts	R 467 m	R 107 m
Expense reserve account	28 m	58 m
Risk reserve account	301 m	148 m
Data and processing reserve account	138 m	(99 m)
Excess assets	-	-
Funding level	100.0%	100.0%



Expense reserve

- Payment of administration and other management expenses
- Balance as at 30 June 2022: **R 58 million**
 - ✓ Sufficient to cover 63% of annual expenses
 - ✓ Slightly higher than normal recommended balance of 3 to 6 months' expenses
 - ✓ Provide additional buffer for funding of ongoing expenses
- Funded by way of:
 - ✓ Monthly deduction from contributions
 - ✓ Deduction from daily unit prices
- Recommendations:
 - ✓ Reduce the monthly deduction from unit prices from 0.02% to 0.01%
 - ✓ Alignment of opening balance in the financial statements for period ending 30 June 2023
 - ✓ Continue to monitor on an annual basis



● Risk reserve

- Balance as at 30 June 2022: **R 148 million**
(compared to R 301 million as at 30 June 2021)
- **Sanlam premium rates increased with 55%** with effect from 1 July 2021 due to claims experience.
- Increase was subsidized from the balance in the risk reserve → subsidy during valuation period amounted to R 164 million
- **Self-insurance** of lump sum death and disability benefits implemented from 1 July 2022
- Insurance of the funeral benefits remained with Sanlam
- Self-funding of benefits → two broad aspects
 - ✓ Minimum reserve balance to act as buffer
 - ✓ Allocation of contributions towards funding



Risk reserve

- Balance as at 30 June 2022: **R 148 million**
- No IBNR provision* required as at 30 June 2022 as all such claims are covered by Sanlam in terms of the fund's underwriting agreement in place, provided claims are notified per the agreement

** Claims incurred but not yet reported by 30 June 2022*

- Minimum recommended balance in terms of PF117 amounts to R 76 million
- **Minimum balance hence 1.9 times covered**
- Recommendation:
 - ✓ Fund adopts a strategy whereby twice the PF117 recommended reserve balance is aimed for (R 152 million)
 - ✓ Recommend that current balance be retained
 - ✓ Fund has effected catastrophe excess of loss reinsurance, which is valid until 31 July 2023 → timeous renewal



Self-insurance | Brief background

Self-insure
death &
disability
benefits
effective
1 Jul 2022

Based our
investigation
on last 5
years claims
data

Fitted a known
mortality curve
& adjusted
disability curve

Resulted in
proposed
rates

Annual
review to
determine
premium
rates

Calculated
crude and
smoothed rates

Calculated
required
premium
rates per
category

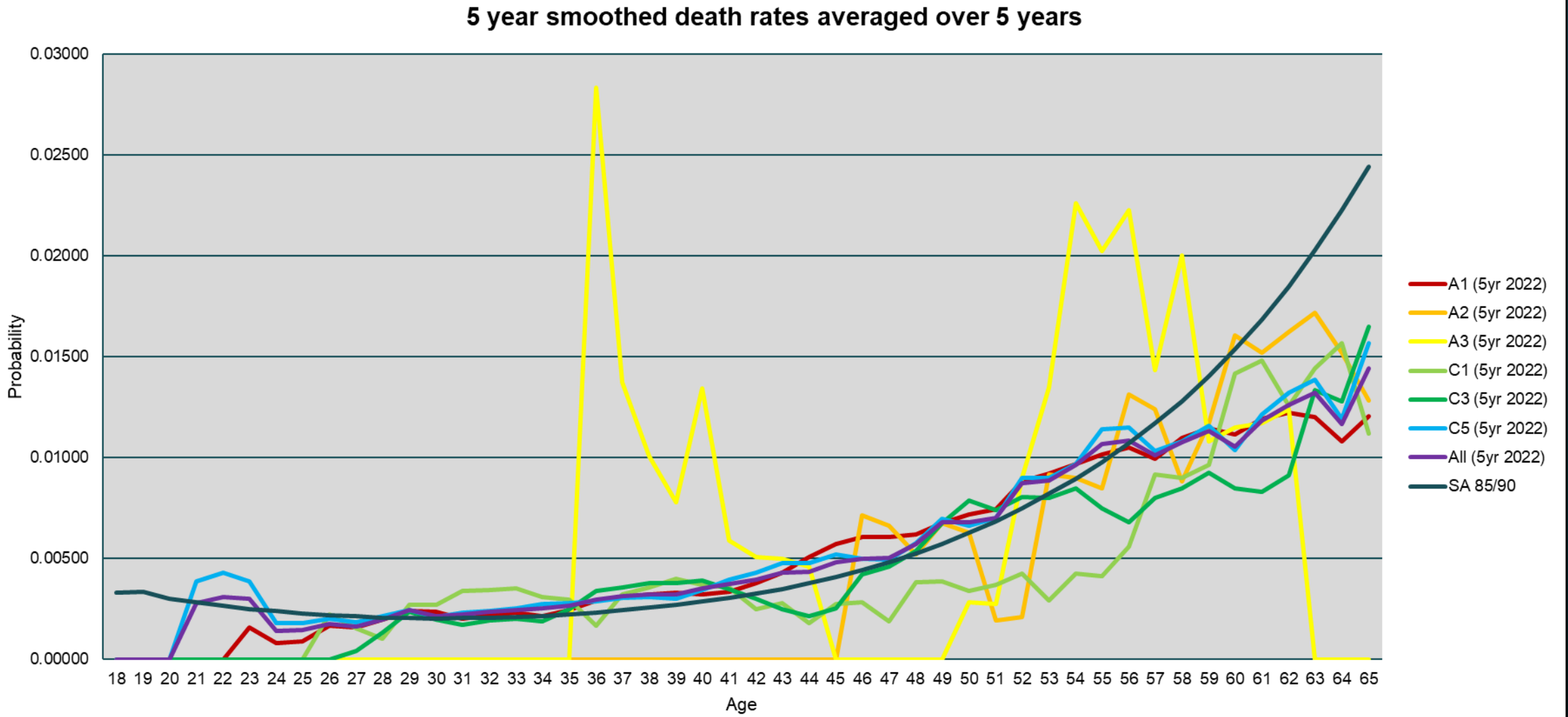
Claims Data | Number of Death claims

Financial year of death	A1	A2	A3	C1	C3	C5	Total
2018	141	2	2	15	32	102	294
2019	133	2	3	7	25	101	271
2020	82	2	2	2	18	67	173
2021	305	4	2	21	57	260	649
2022	154	1	-	10	44	126	335
Totals	815	11	9	55	176	656	1 722

Claims Data | Number of Disability claims

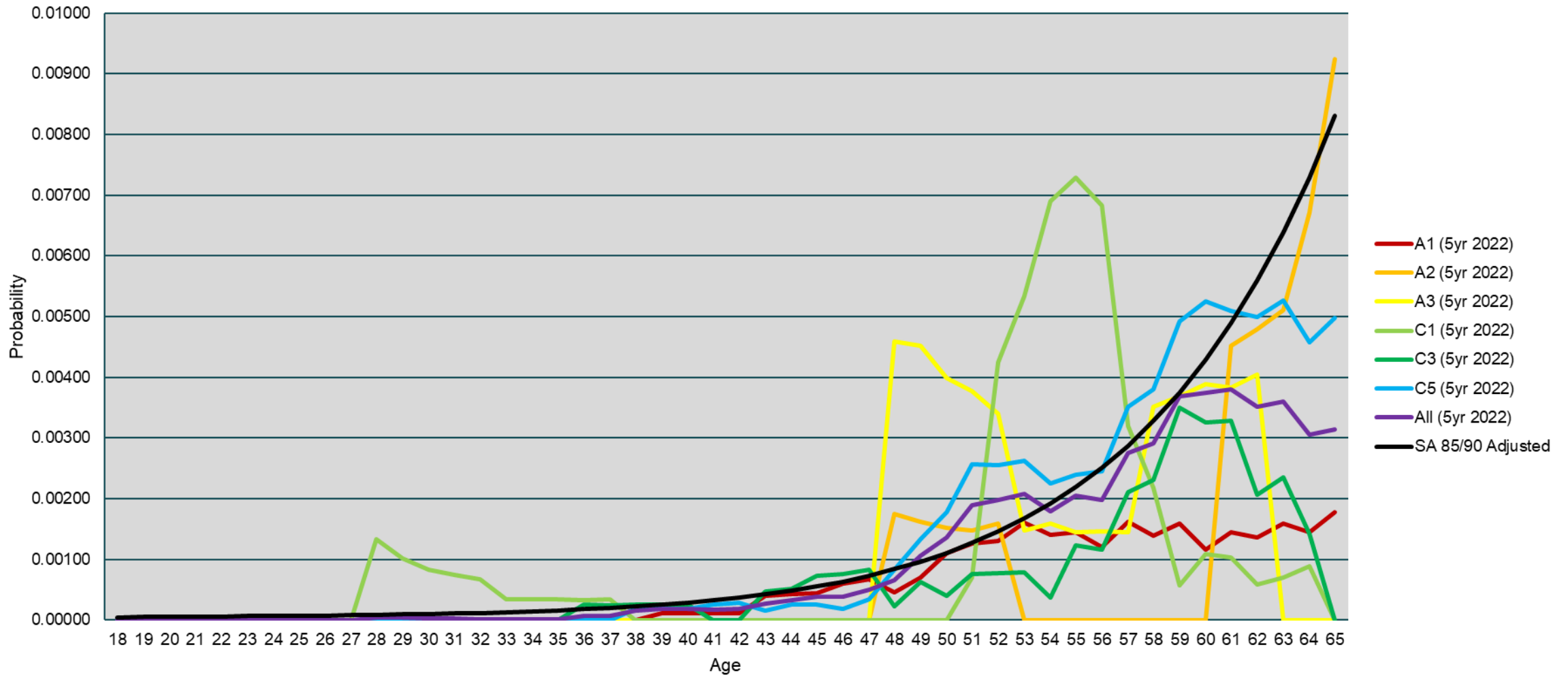
Financial year of disability	A1	A2	A3	C1	C3	C5	Total
2018	19	1	1	3	3	19	46
2019	9	1	-	2	6	30	48
2020	10	1	1	1	3	9	25
2021	11	-	-	3	2	9	25
2022	7	-	1	1	2	18	29
Totals	56	3	3	10	16	85	173

Smoothed Rates | Death claims



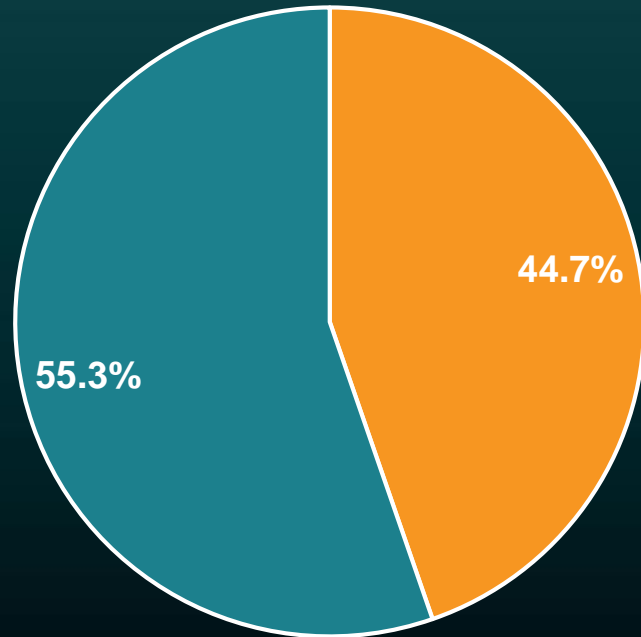
Smoothed Rates | Disability claims

5 year smoothed disability rates averaged over 5 years

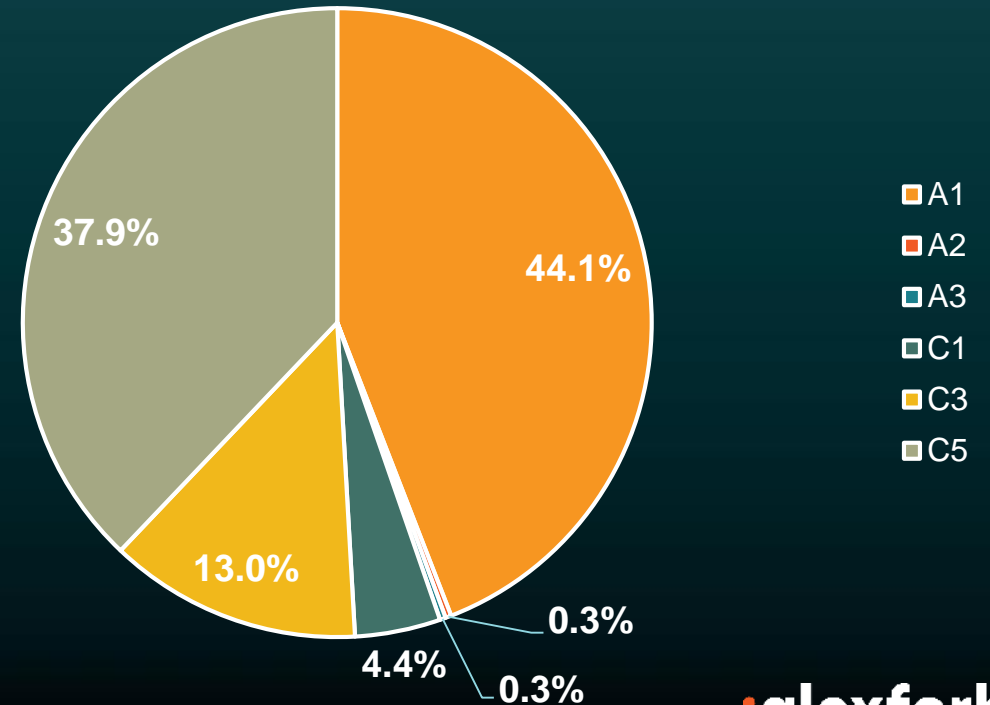


Benefit categories | Cover multiples & member split

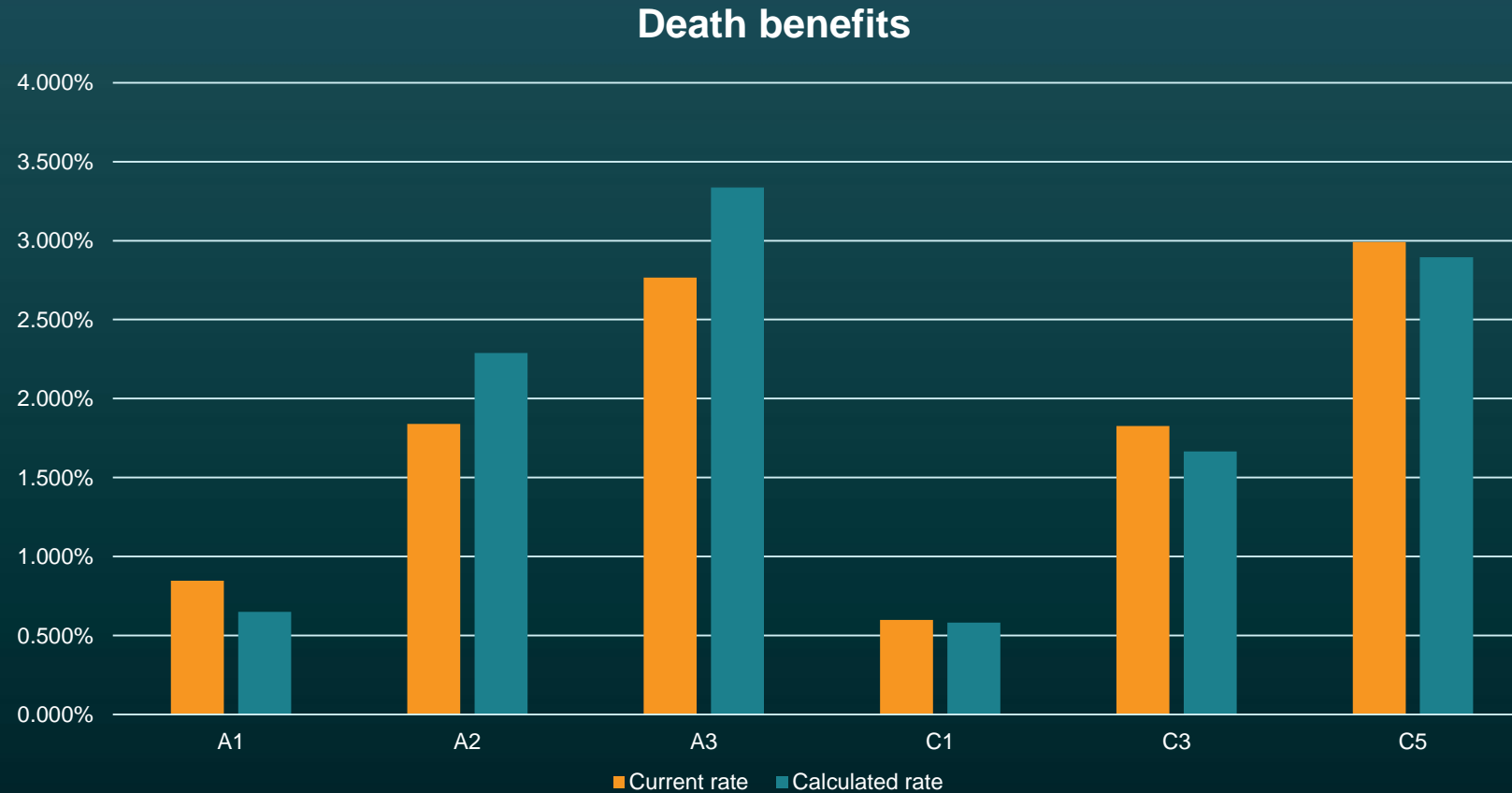
Risk cover	A1	A2	A3	C1	C3	C5
Death multiple	1	2	3	1	3	5
Disability multiple	1	2	3	1	3	3



■ A-category
■ C-category

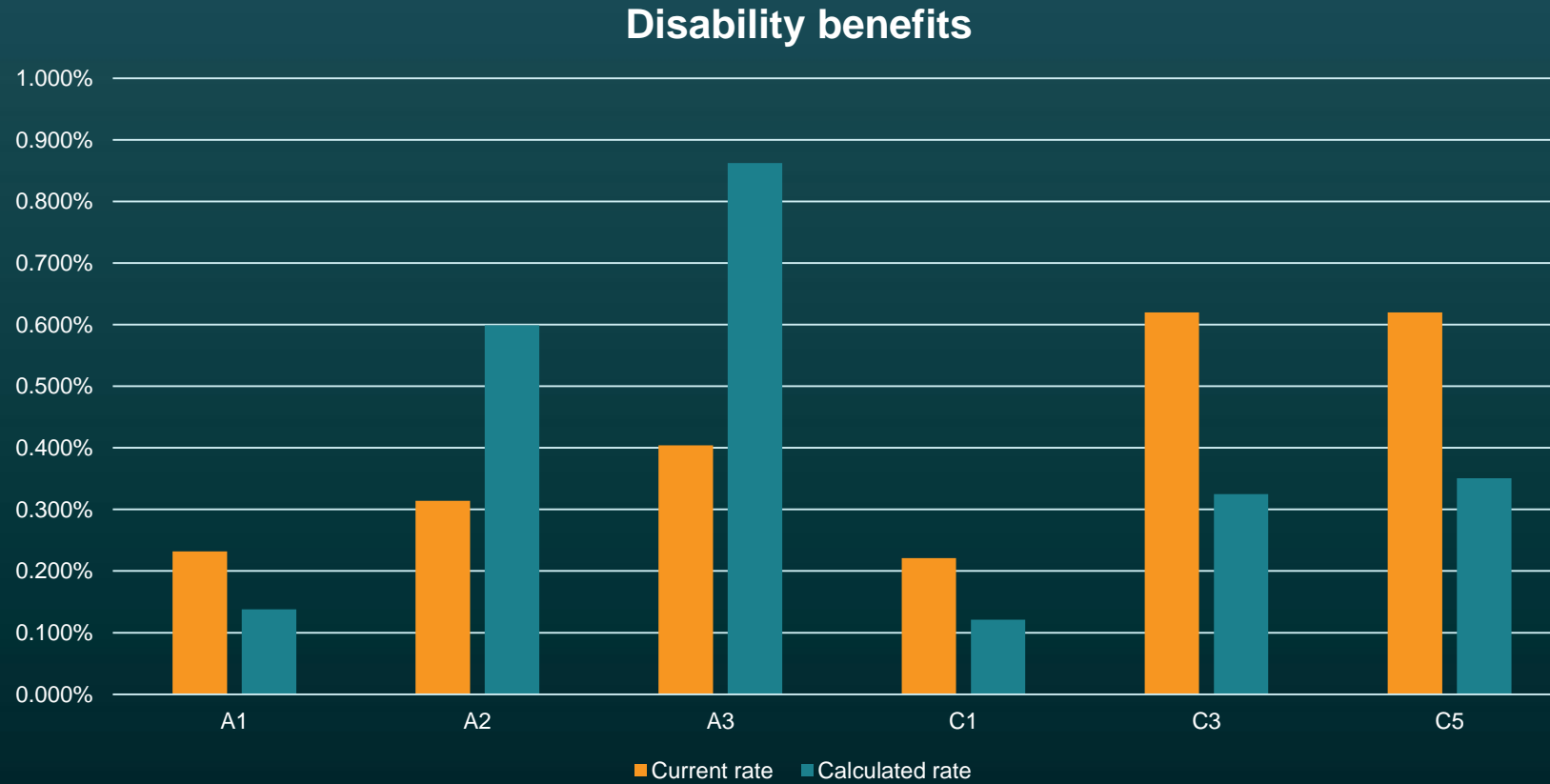


Current Rates (Sanlam 2020) vs Calculated Rates



Category A2 & A3 have older membership,
hence higher calculated rates

Current Rates (Sanlam 2020) vs Calculated Rates



Category A2 & A3 have older membership,
hence higher calculated rates

Claims experience | 9 months to 31 March 2023

Death claims	A1	A2	A3	C1	C3	C5
Adjusted death rate	0.599%	0.083%	1.922%	0.481%	1.400%	2.547%
Current premium	0.847%	1.839%	2.767%	0.600%	1.827%	2.992%
Actual / Expected	71%	5%	69%	80%	77%	85%



- Actual cost of death benefits is about 80% of contributions paid
- Smaller categories (A2 and A3) will experience greatest fluctuations
- Actual cost of providing benefits for same level of cover is higher for category A than for Category C (A1 vs C1 and A3 vs C3)
- Also evident from premiums currently charged (Sanlam 2020)

Claims experience | 9 months to 31 March 2023

Disability claims	A1	A2	A3	C1	C3	C5
Adjusted disability rate	0.079%	0.157%	0.236%	0.133%	0.236%	0.323%
Current premium	0.232%	0.314%	0.404%	0.221%	0.620%	0.620%
Actual / Expected	34%	50%	58%	60%	38%	52%



- Actual cost of disability benefits is about 46% of contributions paid
- Results very dependent on IBNR provision
- Historic claim patterns fairly erratic with significant variations from year to year
- Claims very low in 2020 and 2021 → do not expect claims to remain at such low levels (already observed an increase in 2022)

Proposed rates from 1 July 2023

Current rates	A1	A2	A3	C1	C3	C5
Death benefits	0.847%	1.839%	2.767%	0.600%	1.827%	2.992%
Disability benefits	0.232%	0.314%	0.404%	0.221%	0.620%	0.620%
Total	1.079%	2.153%	3.171%	0.821%	2.447%	3.612%

Proposed rates	A1	A2	A3	C1	C3	C5
Death benefits	0.70%	1.40%	2.10%	0.55%	1.65%	2.75%
Disability benefits	0.10%	0.20%	0.30%	0.15%	0.45%	0.45%
Total	0.80%	1.60%	2.40%	0.70%	2.10%	3.20%

Comparisons	A1	A2	A3	C1	C3	C5
Reduction in rates	(26%)	(26%)	(24%)	(15%)	(14%)	(11%)
Proposed vs Calculated	102%	55%	57%	99%	105%	99%

Proposed premium structure | Summary

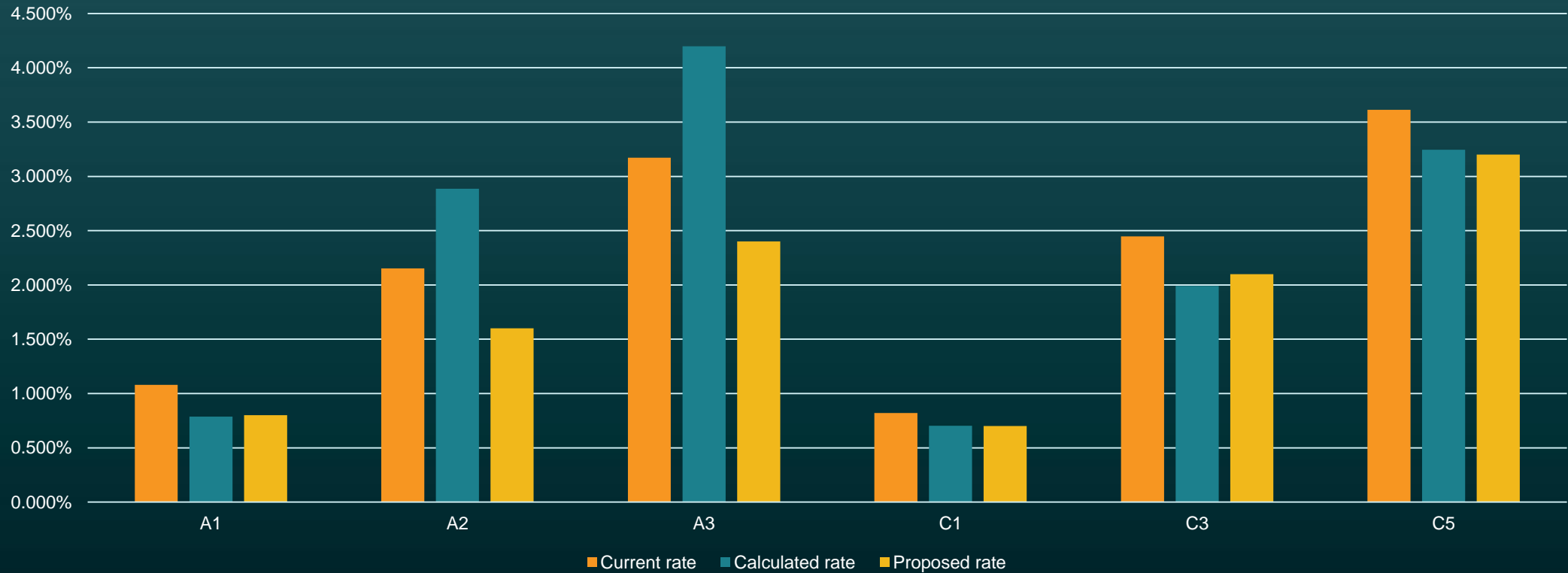


- Premium structure more simplified whilst still treating members fairly
- Still sufficient evidence that indicated that the experience of A-members are different from experience of C-members
- Estimated overall annual savings
 - ✓ Death premiums R 28 million -10%
 - ✓ Disability premiums R 22 million -34%
 - ✓ Overall premiums R 50 million -15%
- Proposed rates very much in line with theoretically calculated rates, except for Category A2 and A3 (due to their older average age compared to total fund)



Current Rates vs Calculated Rates vs Proposed Rates

Total self-insured death & disability benefits



Category A2 & A3 have older membership,
hence higher calculated rates

● Data and processing reserve

- Balance as at 30 June 2022: **(R 99 million)**
(equivalent to negative 0.43% of assets)
- Fund with daily unitization: 0.25% to 0.50% of assets regarded as appropriate
- Value of assets per financial statements for some of the portfolios are different from those used in the daily unitization process as a result of reporting delays: Difference of about R 1 million
- Timing difference: 30 June 2022 unit price for Aggressive Growth portfolio was implemented on 1 July 2022. Fund credits on admin system hence over-stated with R 205 million.
- “True” level of the data and processing reserve as at 30 June 2022 is hence **R 105 million**
(equivalent to 0.45% of assets)





In summary



1. Financially sound position

- Active members, deferred members and living annuitants are fully funded
- Some living annuitants draw at unsustainable rates

2. Reserve accounts

- Expense reserve: R 58 million → Maintain
- Risk reserve: R 148 million → Maintain
- Data and processing error reserve: Negative R 99 million, before allowance for the delayed allocation of the revaluation of some assets and timing difference in implementation Aggressive Growth unit price for 30 June 2022 → No adjustment required, true balance within range

An aerial photograph of a forest with a winding river. The trees are in various shades of green, yellow, and orange, suggesting autumn. The river is a bright blue color. The image is framed by a large, thin, light blue circle.

Retirements

Thank you