

# **Long-term funding for Medical Schemes in South Africa**

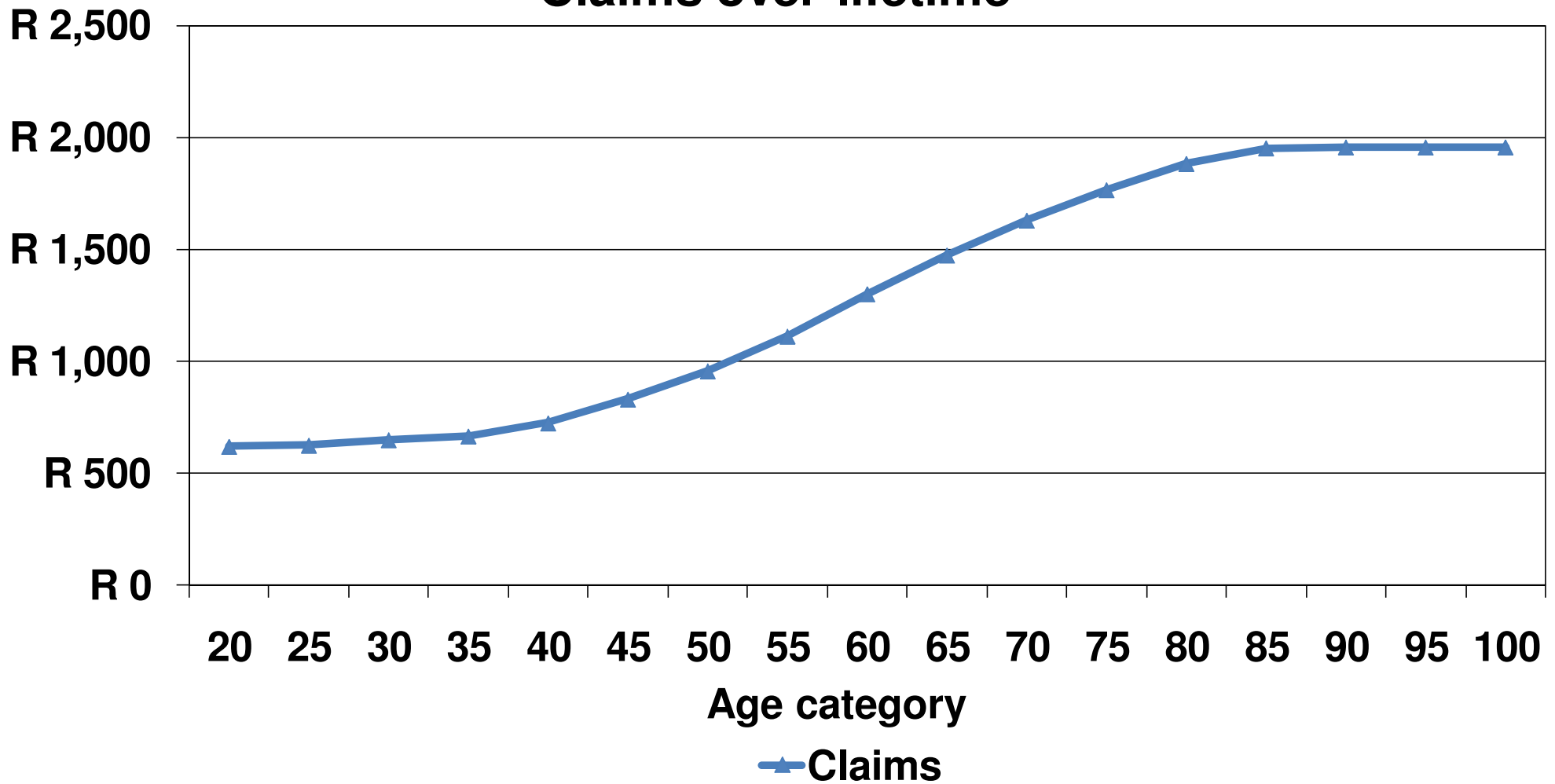
**Presented by:  
Ryan Erasmus  
NMG Consultants and Actuaries**

# Agenda

- Inherent cross-subsidies
- What do you mean ageing?
- What is long-term funding?
- How is it calculated?
- Control cycle approach
- What does it mean for a Scheme?
- Why do schemes want to fund?
- How do schemes fund?
- Legislation

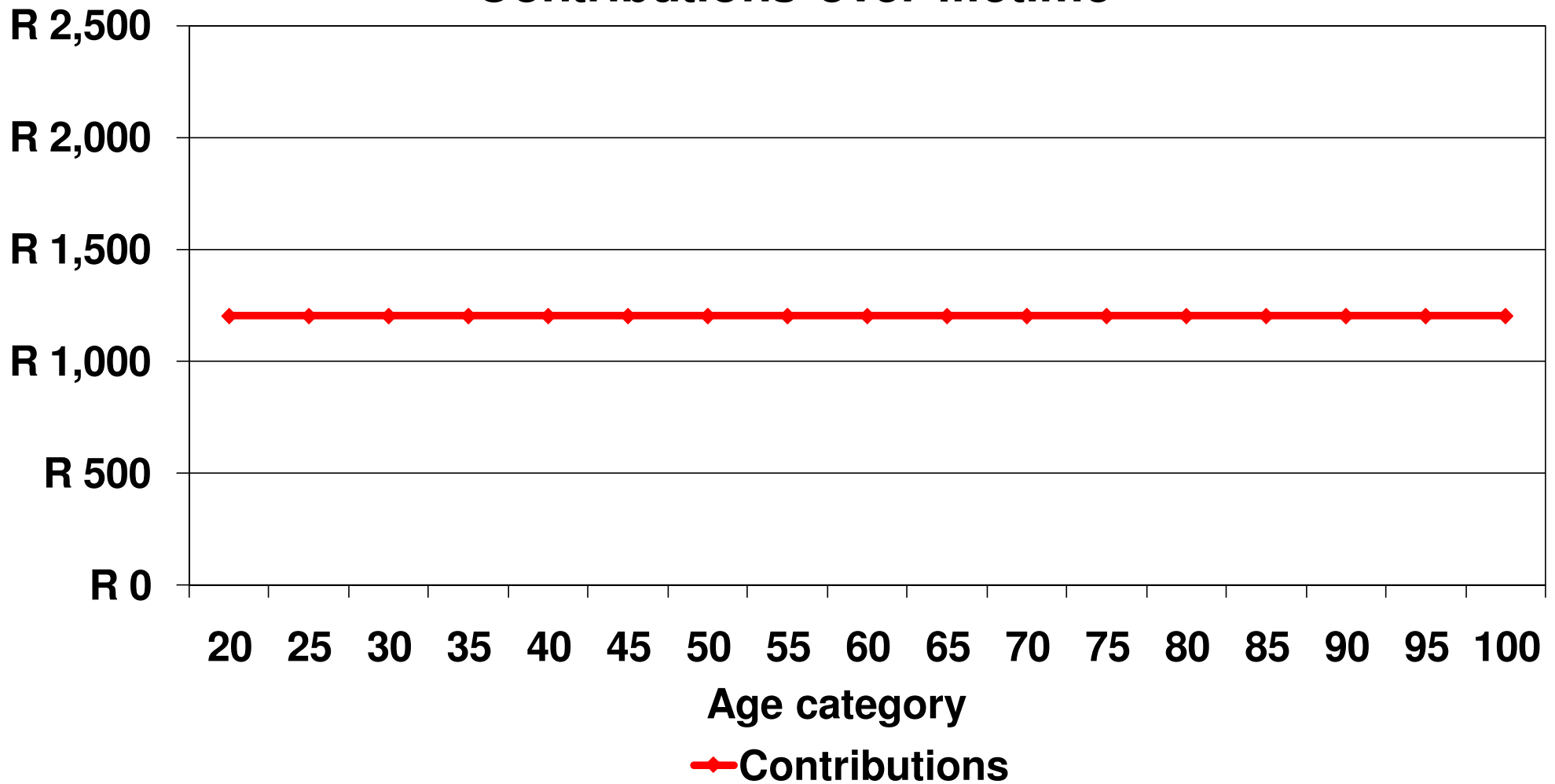
# Inherent cross-subsidies

## Claims over lifetime



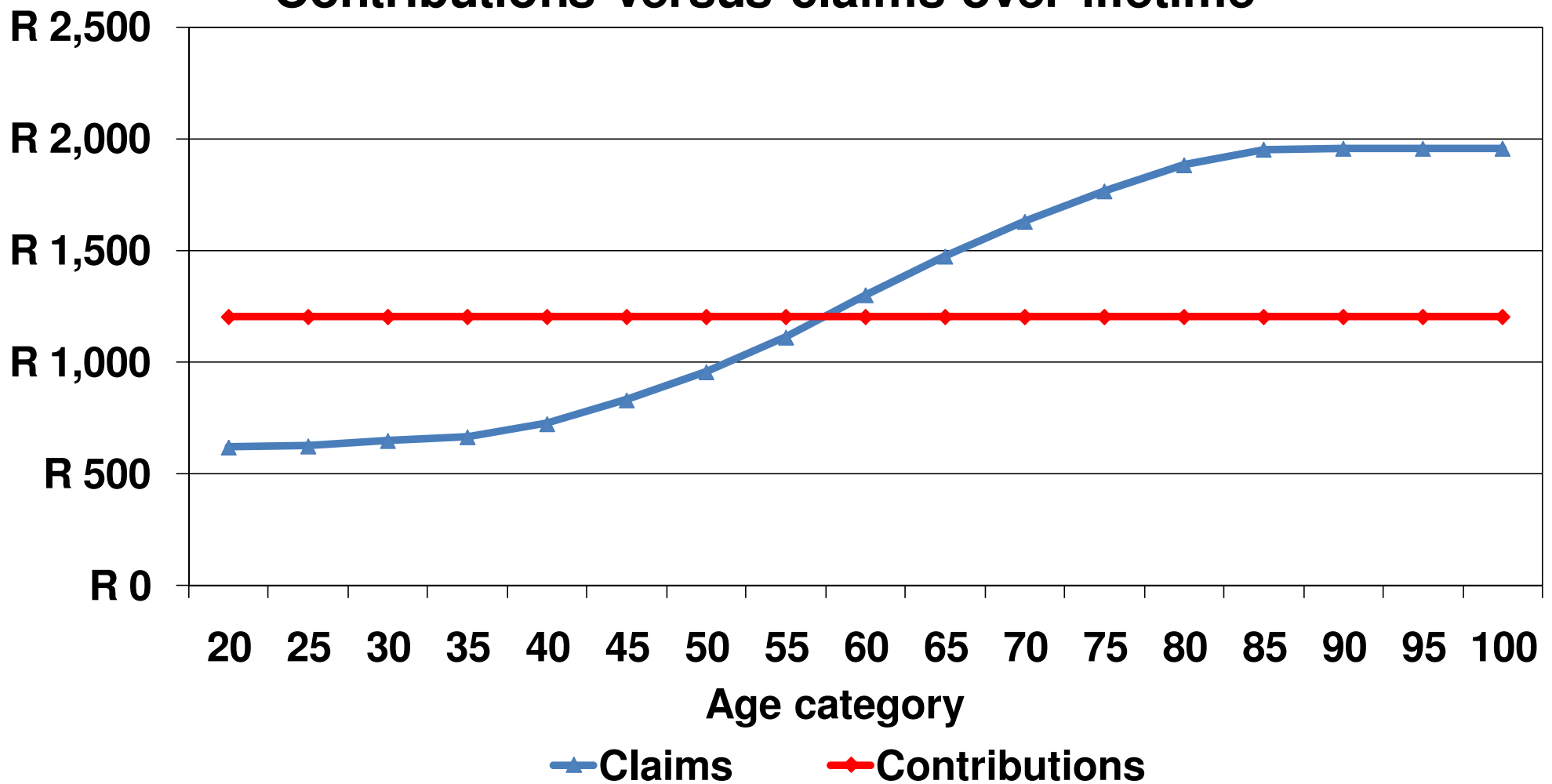
# Inherent cross-subsidies

## Contributions over lifetime



# Inherent cross-subsidies

## Contributions versus claims over lifetime



# What is long-term funding?

- Limited inflow of young lives
- Older lives living longer
  - Ageing profile
  - Increasing average claims over and above inflation
  - Exponential impact over time

# What do you mean "ageing"?



**“Mr Franklin. What did I tell you about wheelies in the hallway?”**

# What do you mean “ageing”?

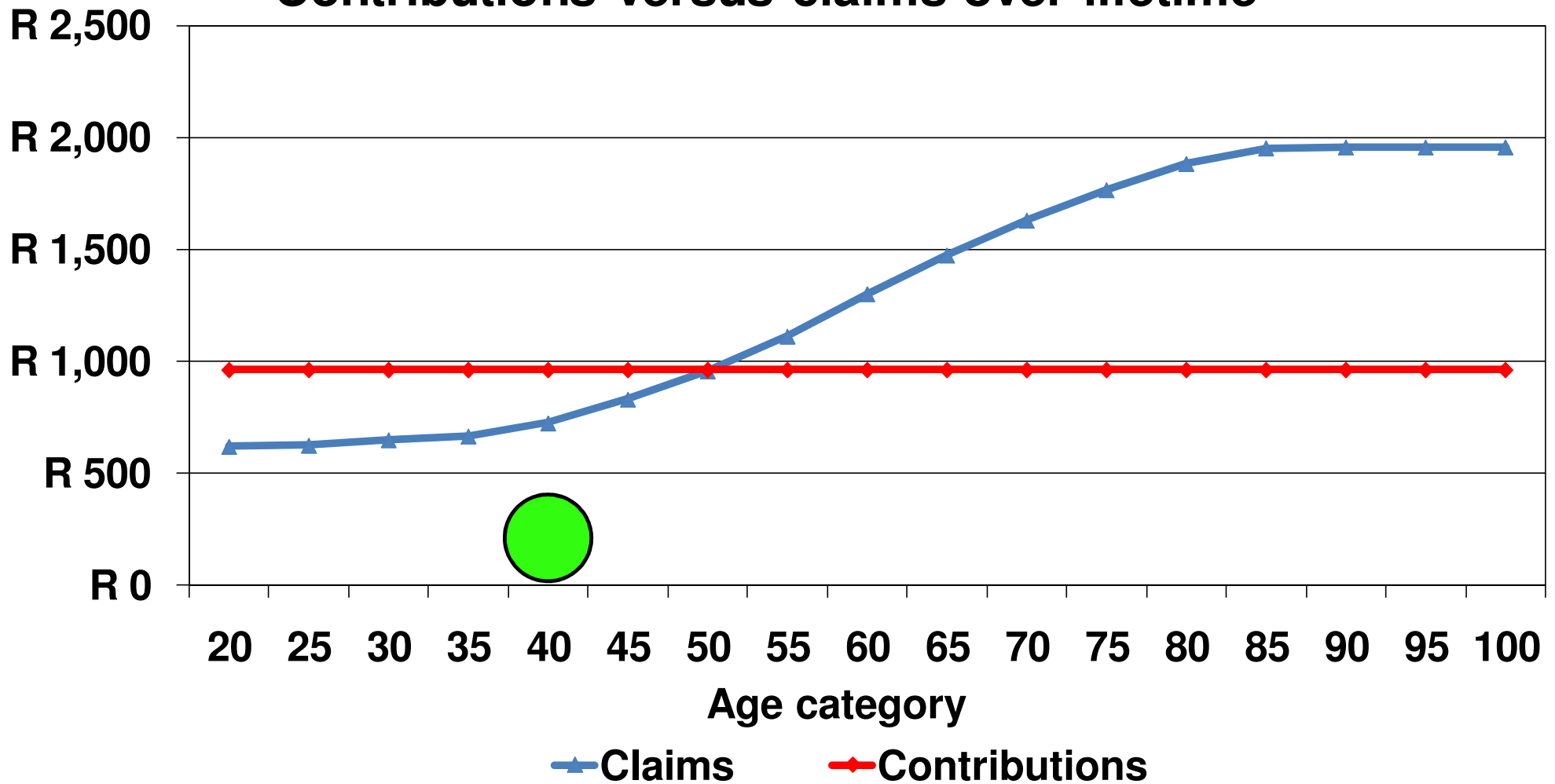
- Limited inflow of young lives
- Older lives living longer
  - Ageing profile
  - Increasing average claims over and above inflation
  - Exponential impact over time
- Long-term funding isolates the future cost of the “ageing” factor
- Approximately 1.5% to 2.5% per annum
- Determines level of reserves to protect scheme

# What do you mean “ageing”?

- Average age 40, able to set contributions at R1,000
  - In ten years time average age is 50
- => Same set of benefits cost R1,250

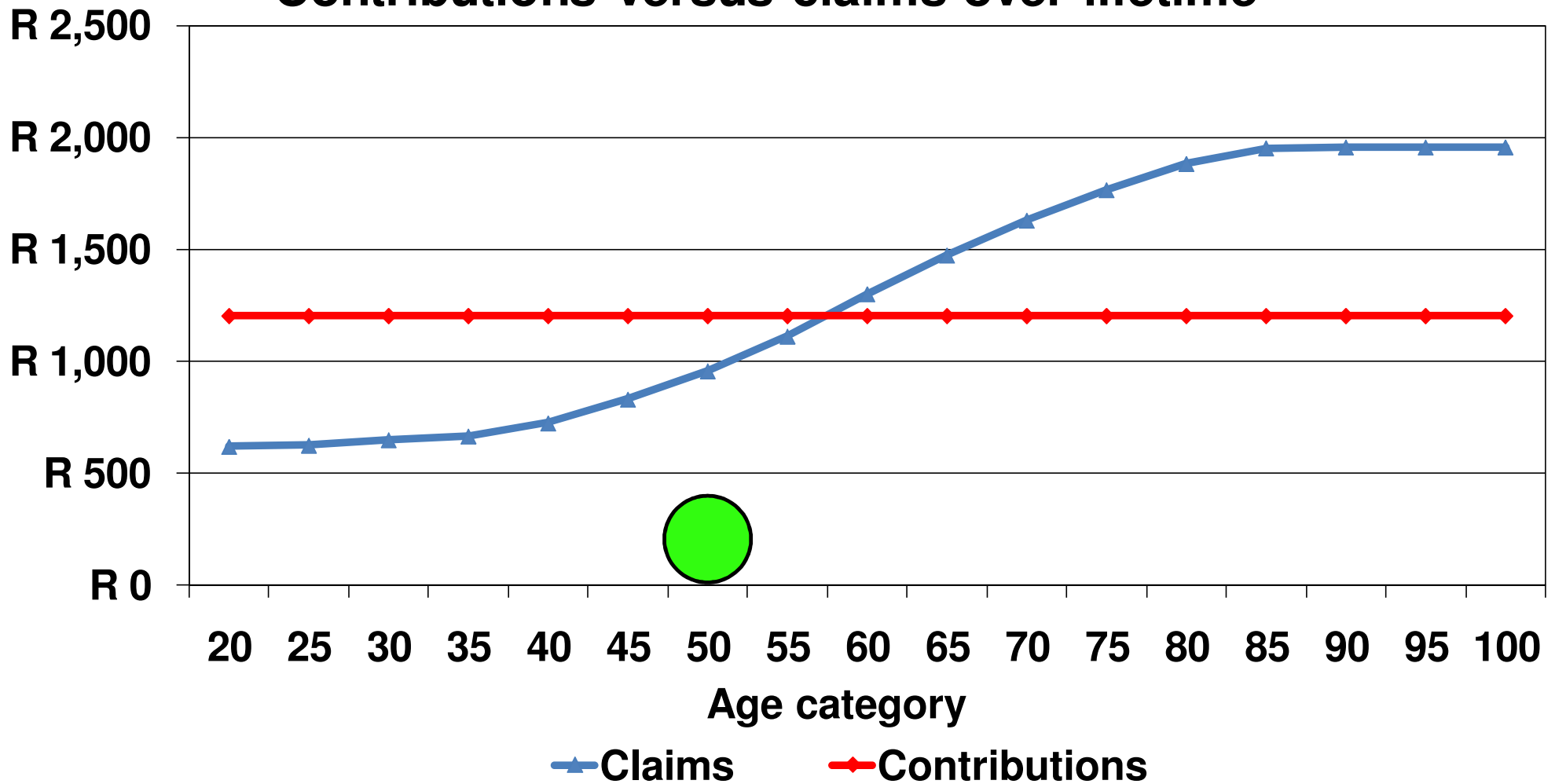
# What do you mean "ageing"?

## Contributions versus claims over lifetime



# What do you mean "ageing"?

## Contributions versus claims over lifetime



# How is it calculated?

- Based on long-term assumptions...
- Economic assumptions
- Membership demographic assumptions
- Option choice
- Claims profile on each option

# How is it calculated?

In simple terms...

- PV of all future claims for a member
- **Less** PV of all future contributions + expenses for a member
- **Equals** liability to scheme if member is old  
asset to scheme if member is young

# What does it mean for a Scheme?

- Knowledge about ageing risk facing the scheme
- Schemes able to reserve for an ageing profile
- Schemes currently in South Africa that are funding their long-term liabilities
- If Assets > Liabilities then funded
- Use drawdown from reserves every year to fund ageing profile
- Long-term approach to reserving

# Why do schemes want to fund?

- More applicable to a restricted scheme?
- Ageing may be beyond scheme's control  
(sale of divisions, restructuring)
- Restricted schemes older than open schemes
- Competitive issues
- Able to maintain market related increases

# How do schemes fund?

- Does not mean you can charge the member!
- Age rating to accurately determine impact but cannot charge age rated contributions
- Issue for open and closed schemes
- Scheme's primary source of income is contributions
- To increase reserves must increase contributions
- Employer to make payments

# How do schemes fund?

- May be incentive for employers
- Know that they retain control
- Benefit design specific for membership
- Manage post-employment liability
- Rest of industry will be ageing while they are covered
- Market related contribution increases
- May be tax benefits for lump sums?

# Adopting long-term funding

- As membership ages scheme will run at an increased operating deficit every year
- Need to keep regulator informed of your plans
- Also need to keep members informed!
- This is a long-term reserving and should not be confused with the 25% solvency

# Legislation

- Risk Equalisation Fund
- “Circular 8” benefit design
- Insurance products
- LIMS

# Risk Equalisation Fund

Is the REF supposed to guard against ageing?

- Chronic conditions expected to increase with age
- If industry age increases...
- More needs to be given back to each scheme...
- REF community rate goes up...
- Receipts for a scheme don't necessarily increase in real terms
- Intended to equalise the industry risk, not mitigate it

# Legislation

- Circular 8 benefit design – cost of basic benefits is directly related to average age of membership
- Insurance products – potential to draw young lives out of the current system resulting in accelerated ageing
- LIMS – Not possible to use low-income options to subsidise to assist with ageing profile

# Thank you

**Ryan Erasmus**  
**NMG Consultants and Actuaries**