

12th Accident Compensation Seminar 2009

Rising to the Challenge



Institute of Actuaries of Australia

Melbourne • 22nd – 24th November 2009

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**An ageing workforce and workers
compensation – what are the
implications, in particular with an
increasing national retirement age?**

Andrew McInerney



Agenda

1. Population and workforce changes over time
2. What's been happening in workers compensation?
3. Baseline future cost projection
4. Scenarios for future workers compensation costs
 - Increased retirement (pension) age
 - Reduced frequency improvements with increased retirement age
5. Implications for Scheme design

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Population and Workforce Changes Over Time

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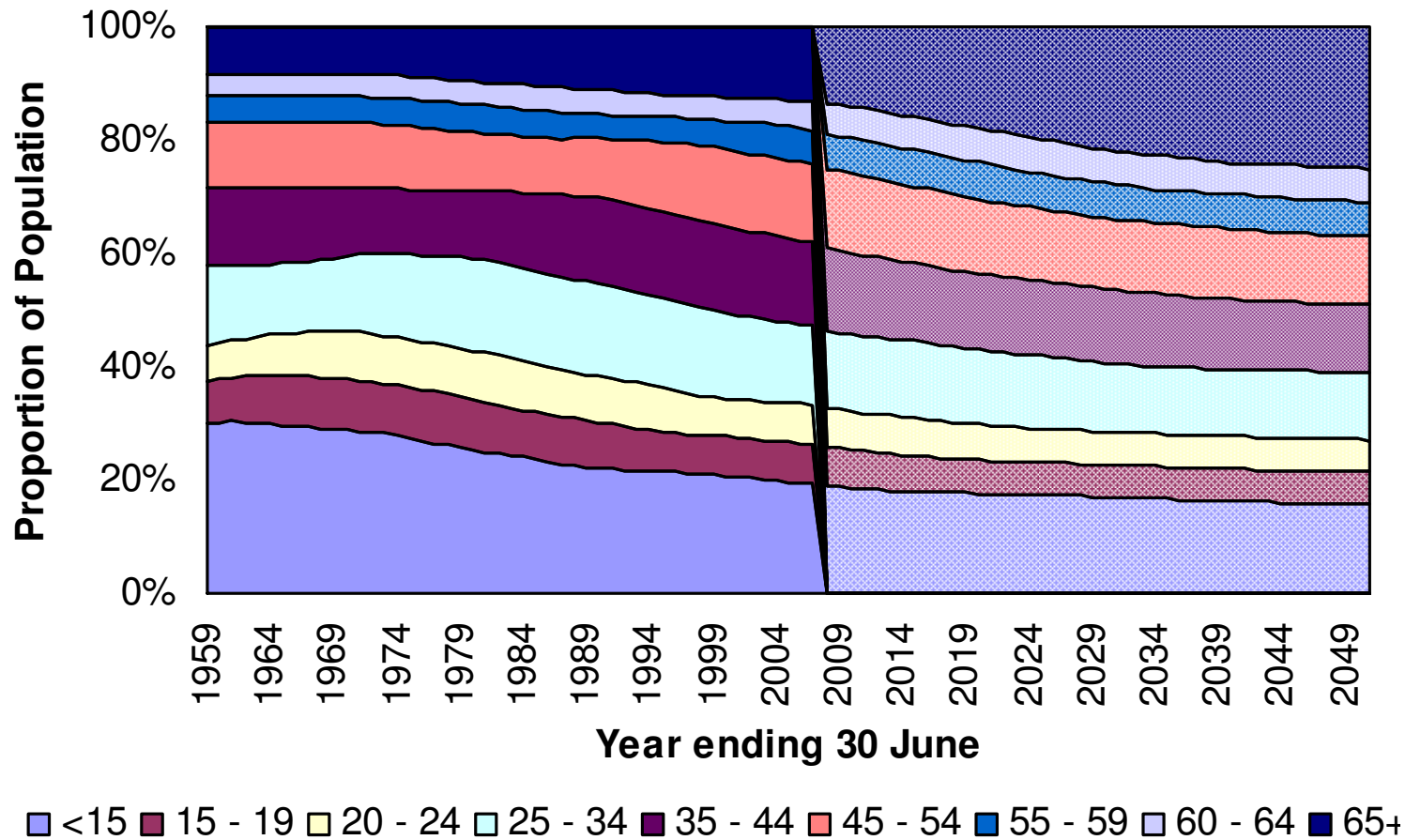
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Population Ageing



Historical population (ABS), and future projection (Productivity Commission (PC), 2005)

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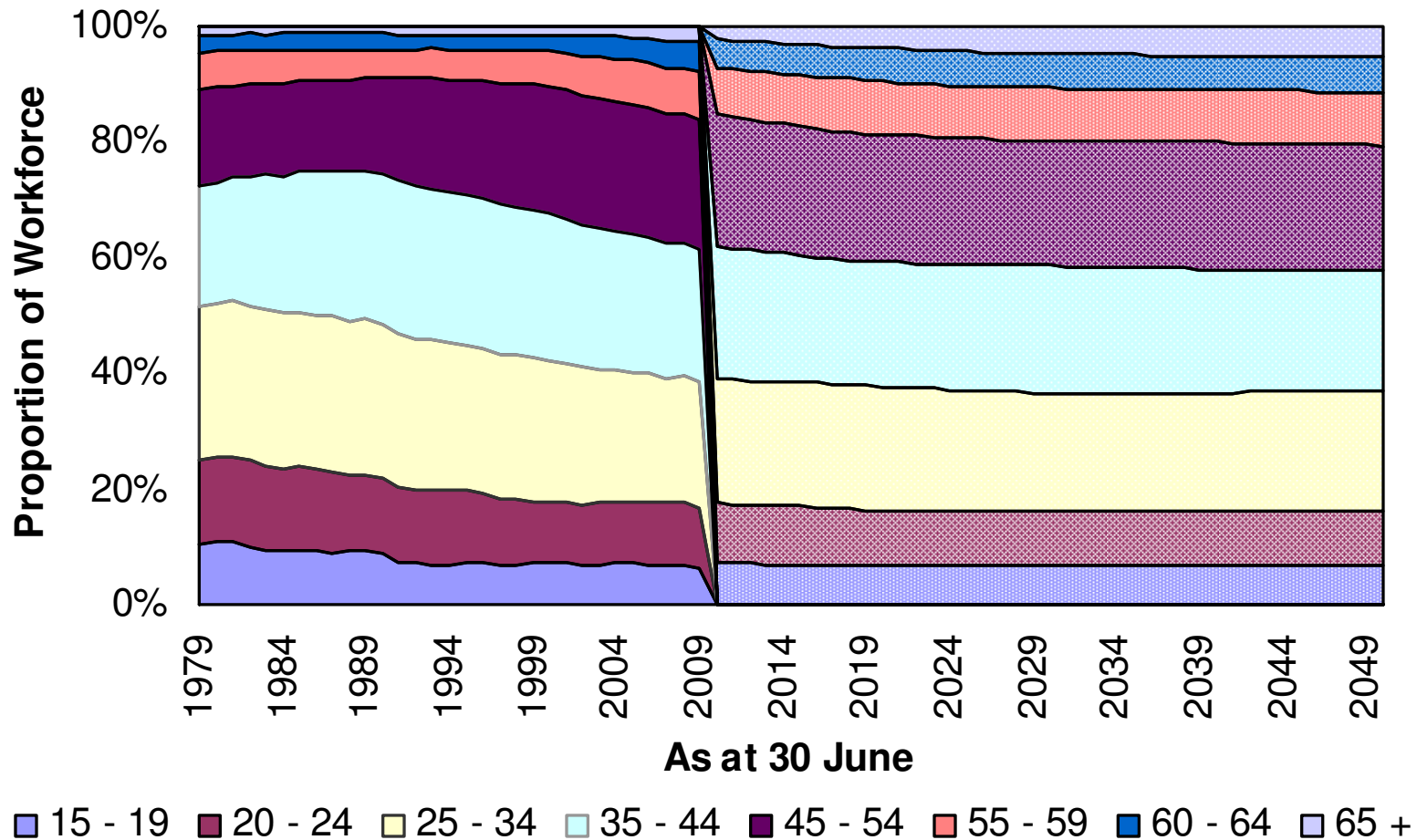
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Workforce Changes – Proportions



Historical workforce (ABS), and future projection (Productivity Commission (PC), 2005)

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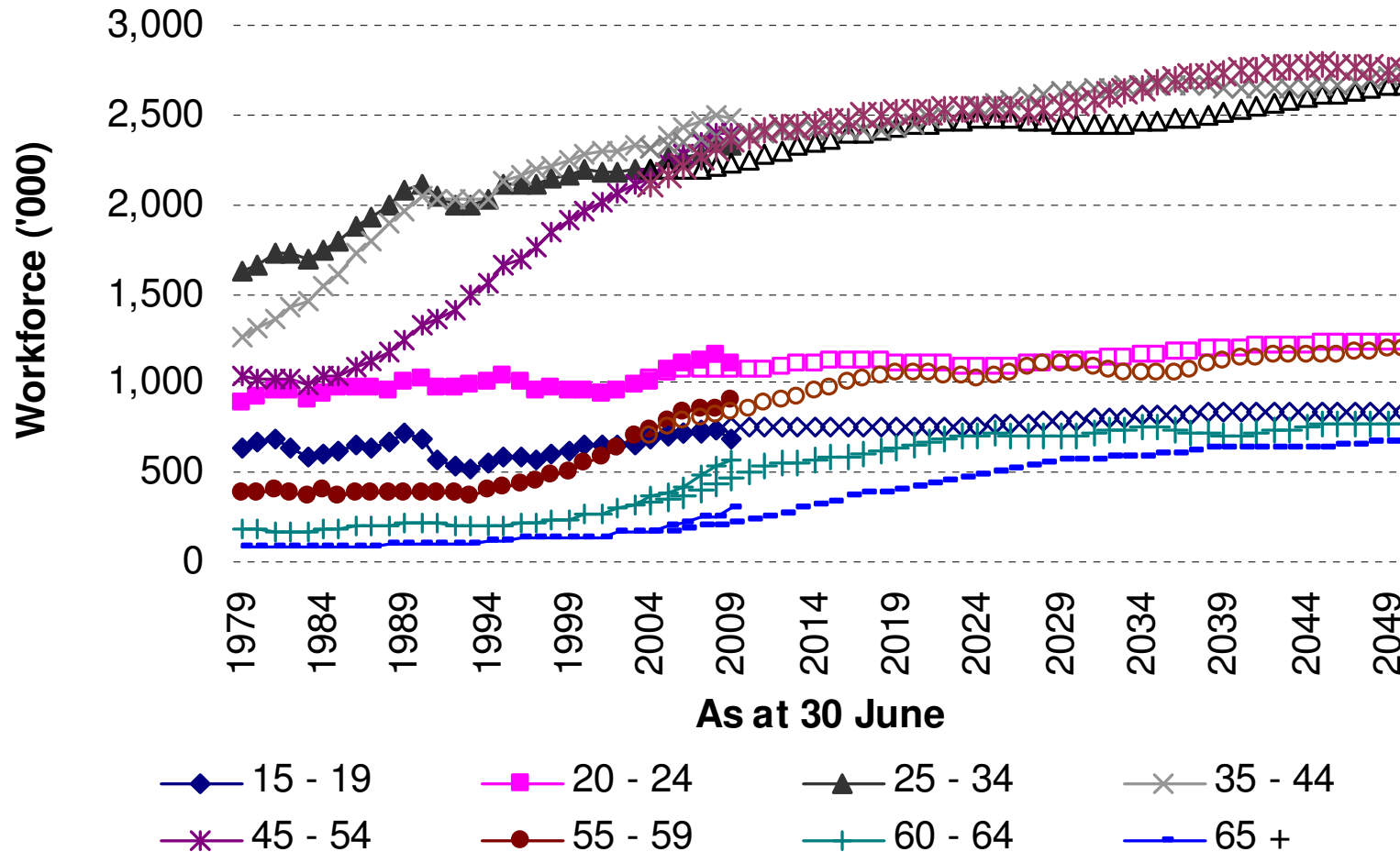
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Workforce Changes – Numbers



Historical workforce (ABS), and future projection (Productivity Commission (PC), 2005)

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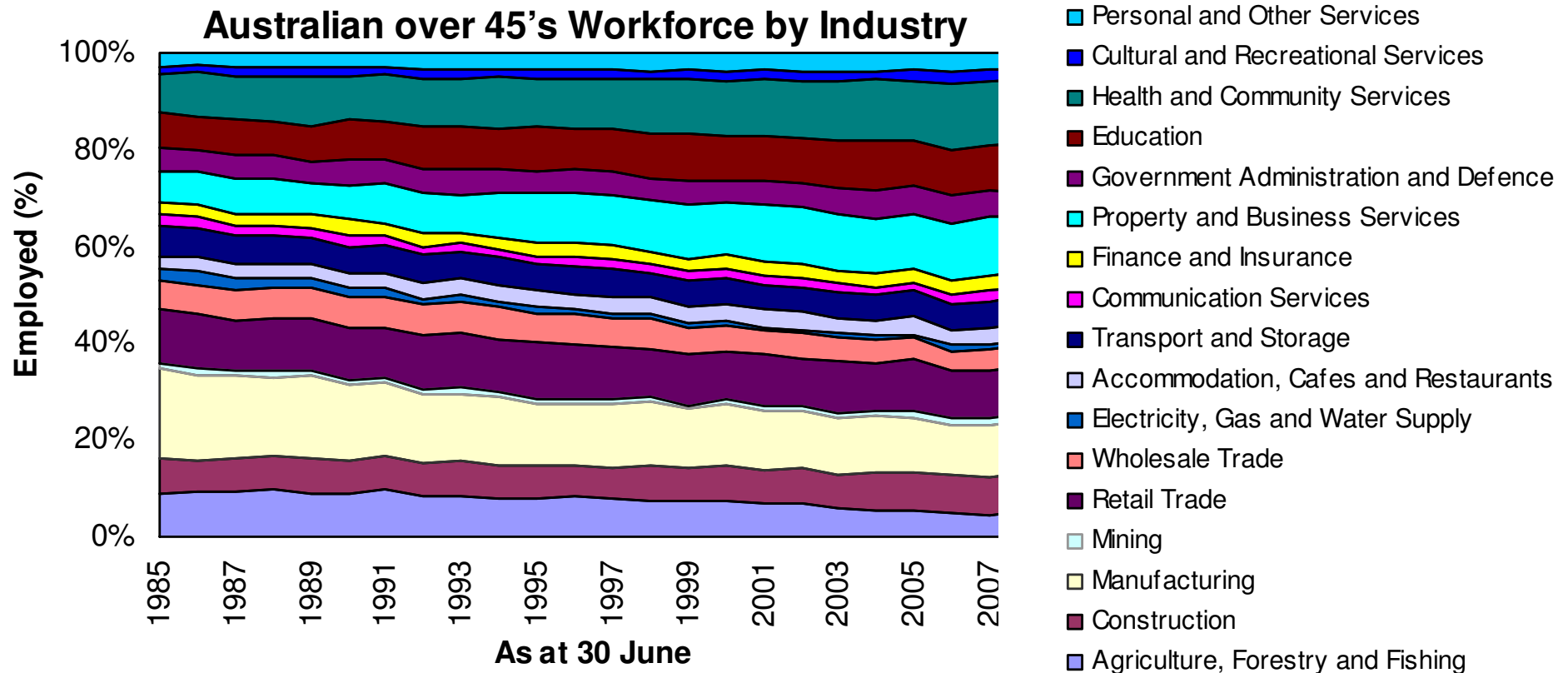
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Where do Older Australians Work?

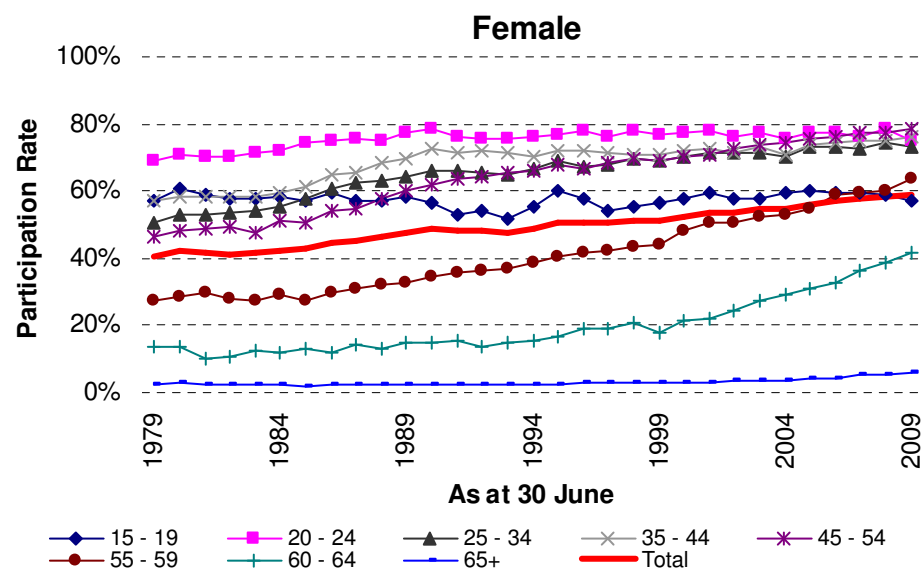
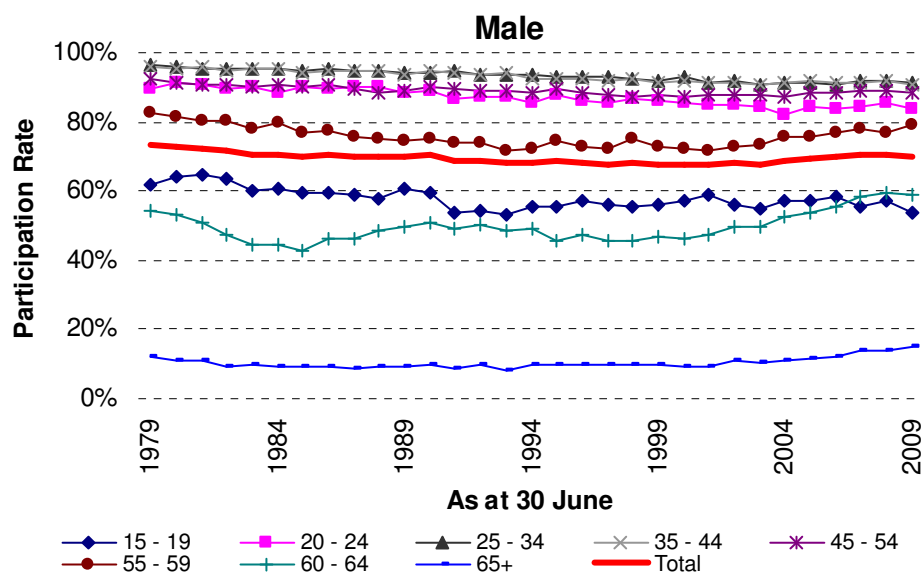


- Where will they work in the future?
- Where should (shouldn't) they be working?



Could We See More Workforce Ageing?

- PC allowed for increased participation rates for older females – much of which has already been caught up
- PC also projected some declines for mid to older aged male participation over time



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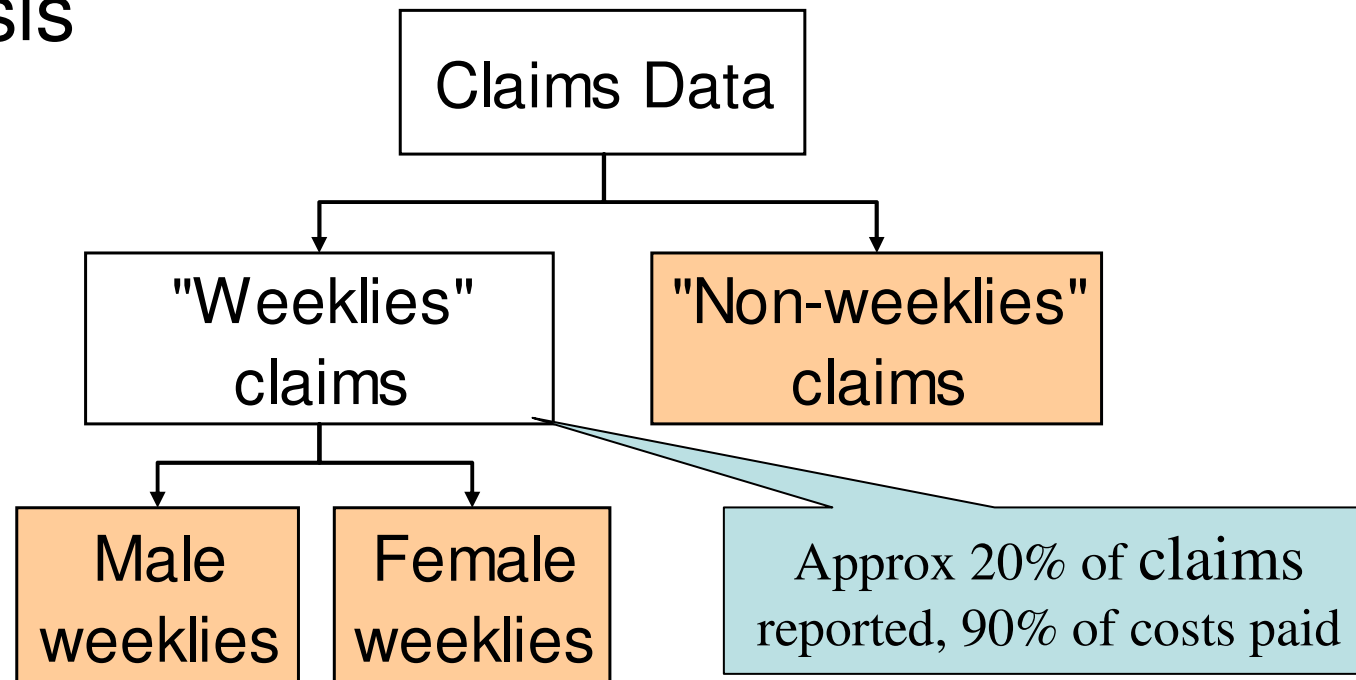


What's Been Happening in Workers Compensation?



Decomposing Claim Costs (1)

- Analysis and modelling for claims has been based on three groups
- South Australian claims data was used for the analysis





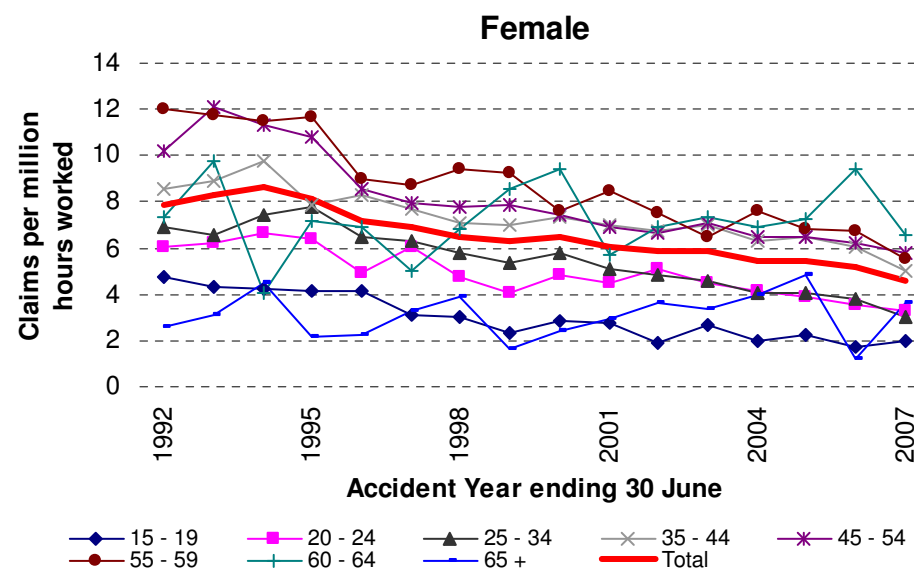
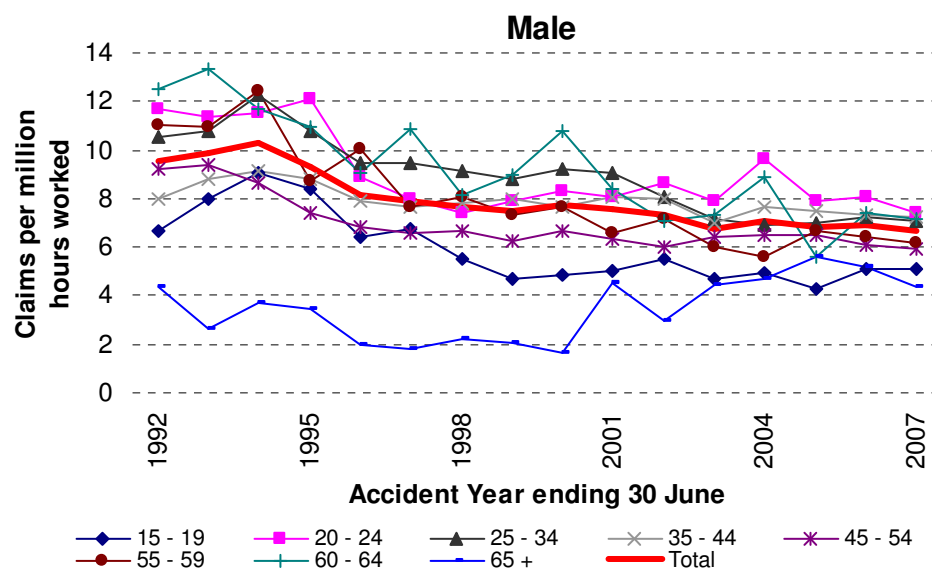
Decomposing Claim Costs (2)

- Claim frequency and claim size relativities were examined over time for each of the three groups
- Each of these cost drivers was further subset by age band (at injury date) within each group
- All analysis and projections were in June 2009 dollar values – the aim is to compare relative changes over time



Weeklies Claim Frequencies

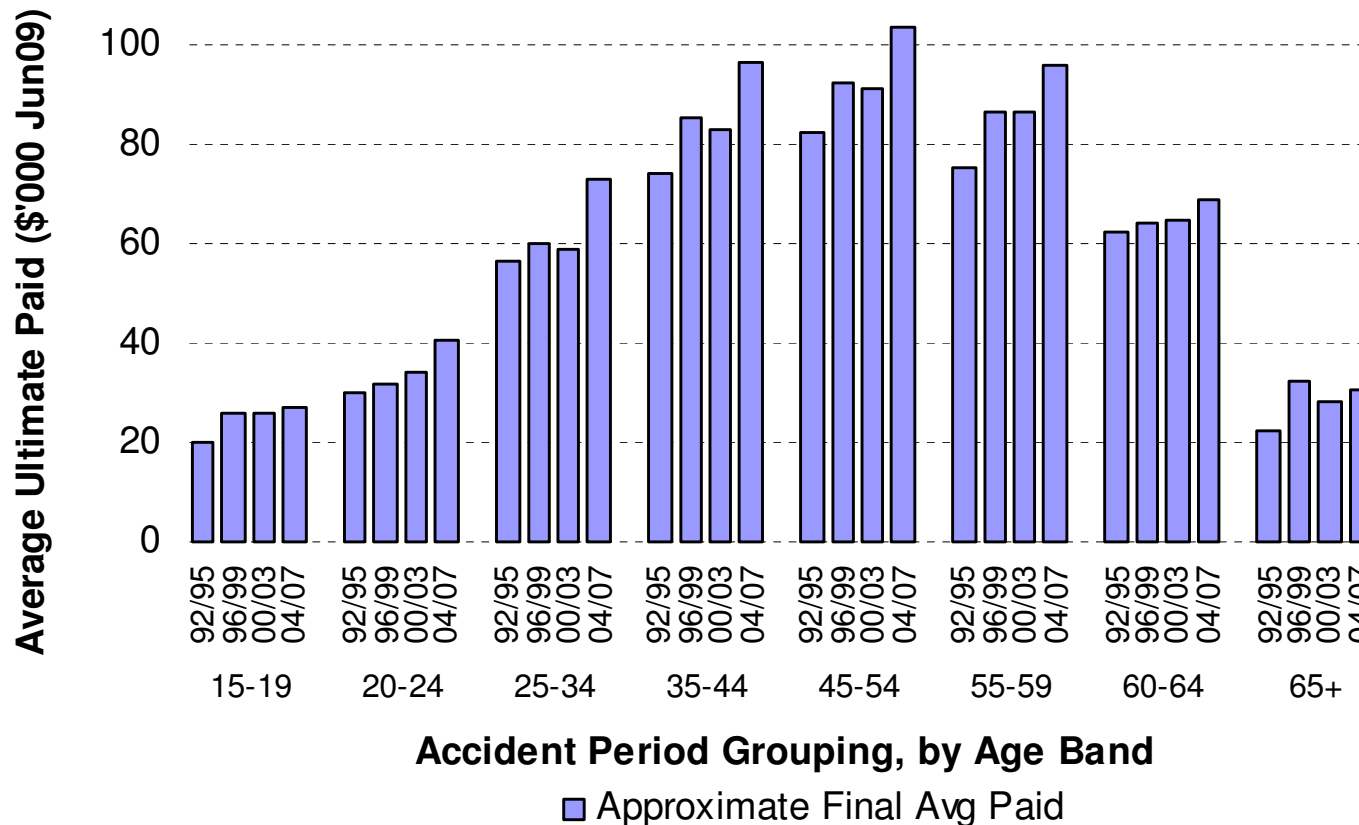
- Sixteen year trend of improving claim frequency has been crucial to maintaining overall claim costs
- Some differences in trends by age and gender





Weeklies Average Payments (All)

- Average size varies by age band
- Above AWE inflationary pressure on costs



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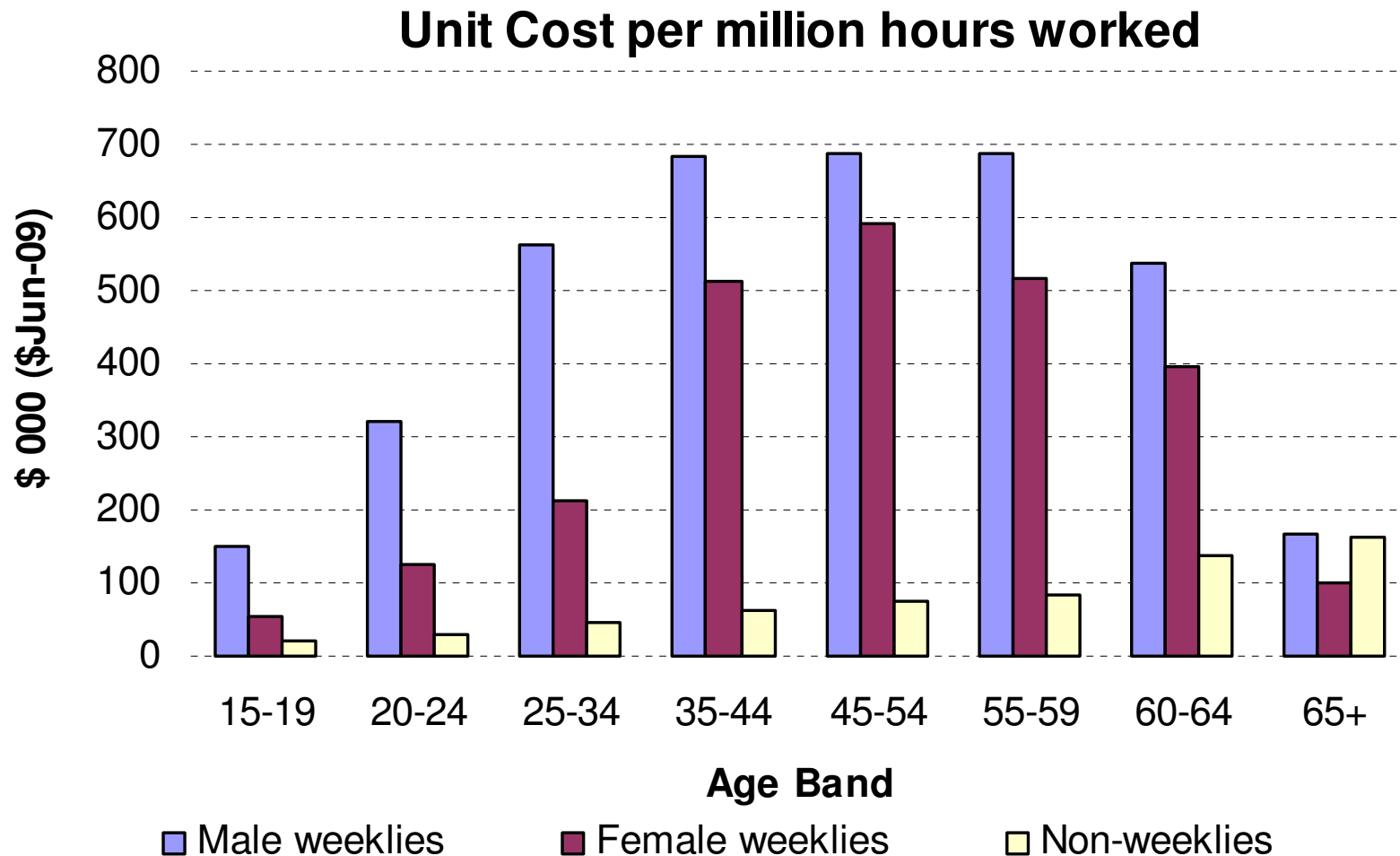
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'Unit Cost' by Age Band – Baseline



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Baseline Future Cost Projection



Key Assumptions – Baseline

- Continued frequency improvement of 1.5% p.a.
- Average size to grow at above AWE inflation over time – set at 1.5% p.a. real growth
- Combined impact of claim assumptions is a constant unit cost within an age band over time
- Workforce profile to change as per Productivity Commission projection

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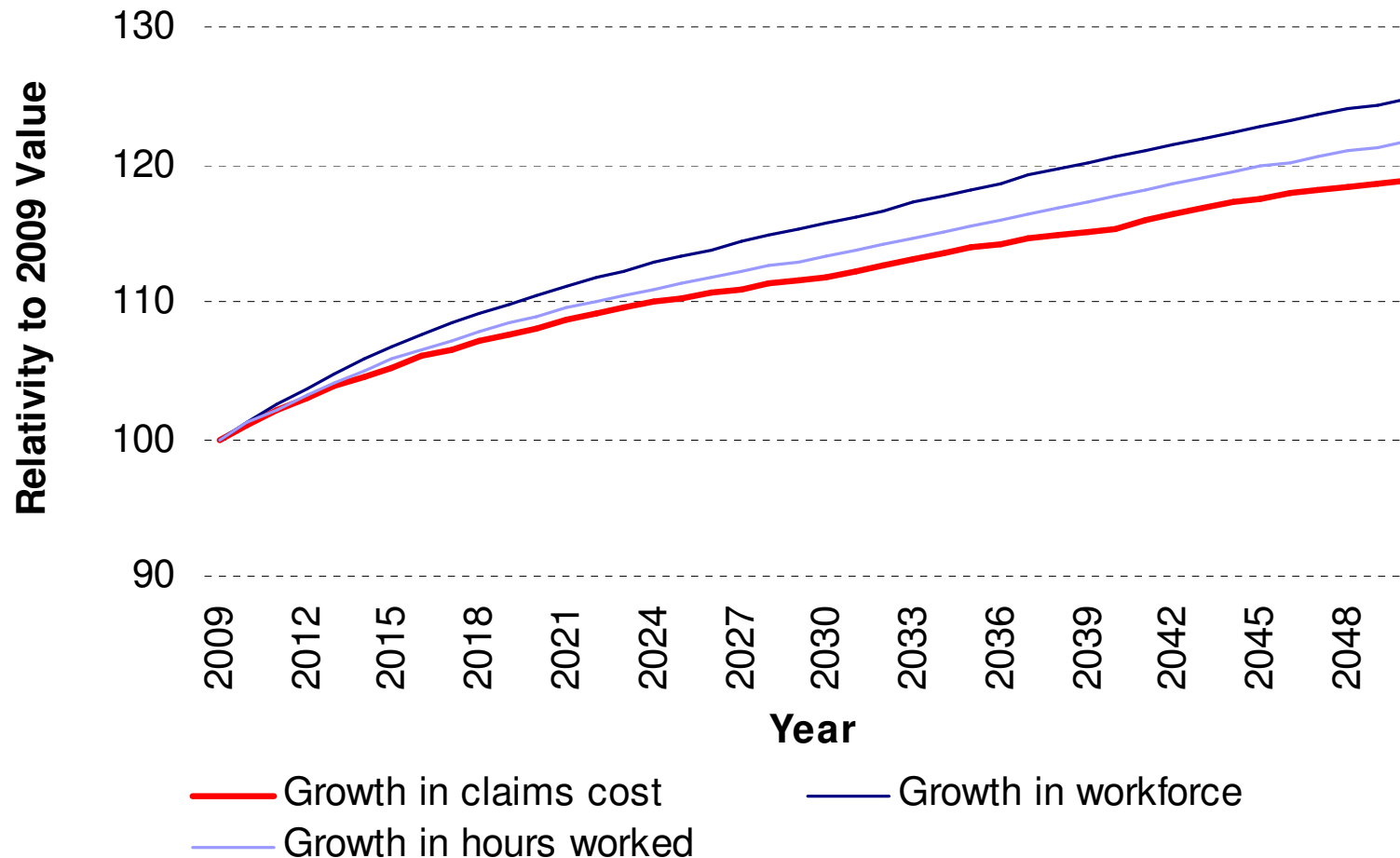
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Relative Change in Claim Cost and Workforce – Baseline





What Does it All Mean?

- All else being equal, the impact of population ageing on the shape of the workforce would not on its own lead to any deterioration in claims cost relative to the exposure base:
 - claim costs up by 19% (in real terms)
 - hours worked up by 22%
- Indeed there is marginal improvement over time, based on the lower average cost of the older claims

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Scenarios for Future Workers Compensation Costs:

Scenario 1 – Increasing the National Retirement (pension) Age



Key Assumptions – Scenario 1: Increased Retirement Age

- Claim frequencies as per Baseline
- Increased average size for those claims who would remain on benefits until retirement – impact of the change increases with age (i.e. older claimants are more likely to stay to retirement age)
- Increased participation rates for older ages as pension age increases (i.e. more older workers than for Baseline workforce)

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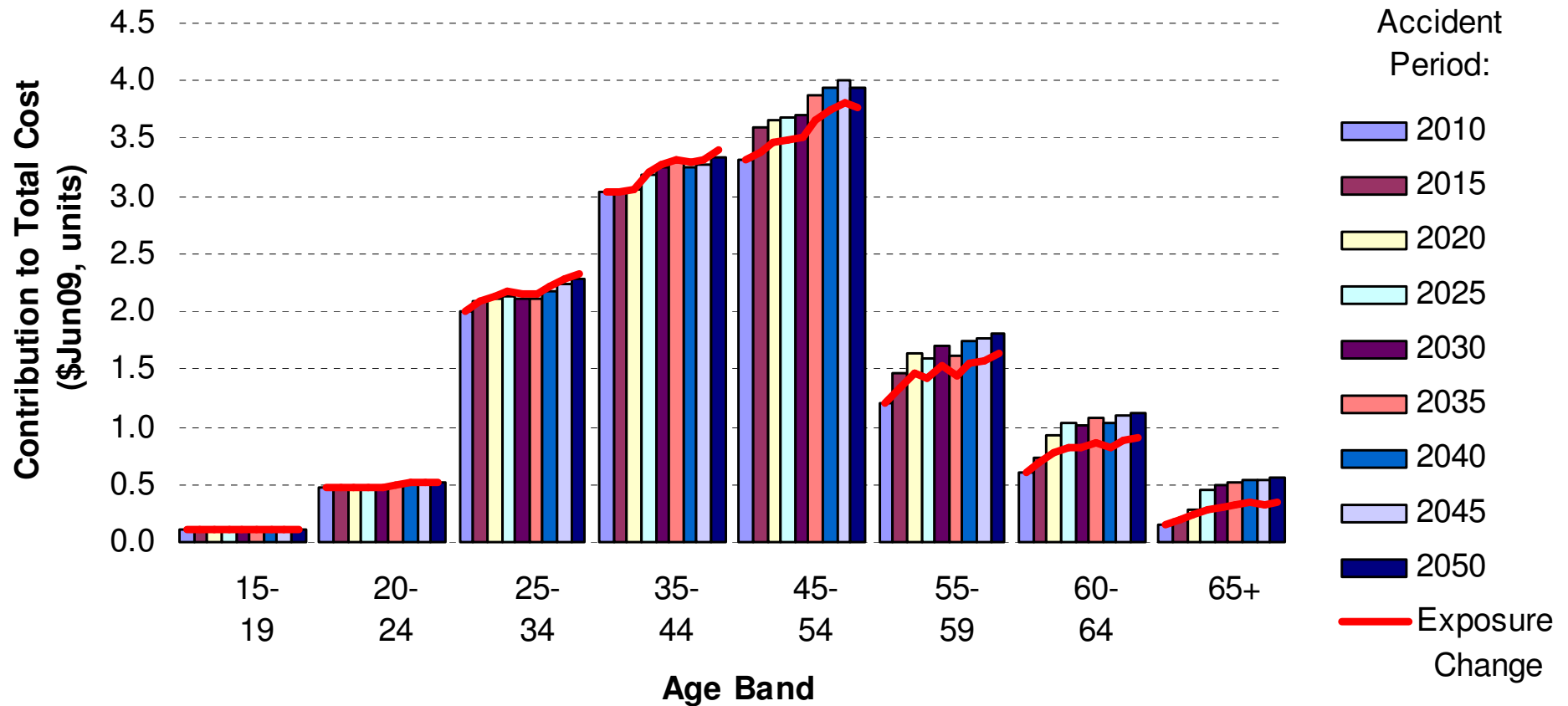
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Contribution to Total Cost Over Time – Scenario 1



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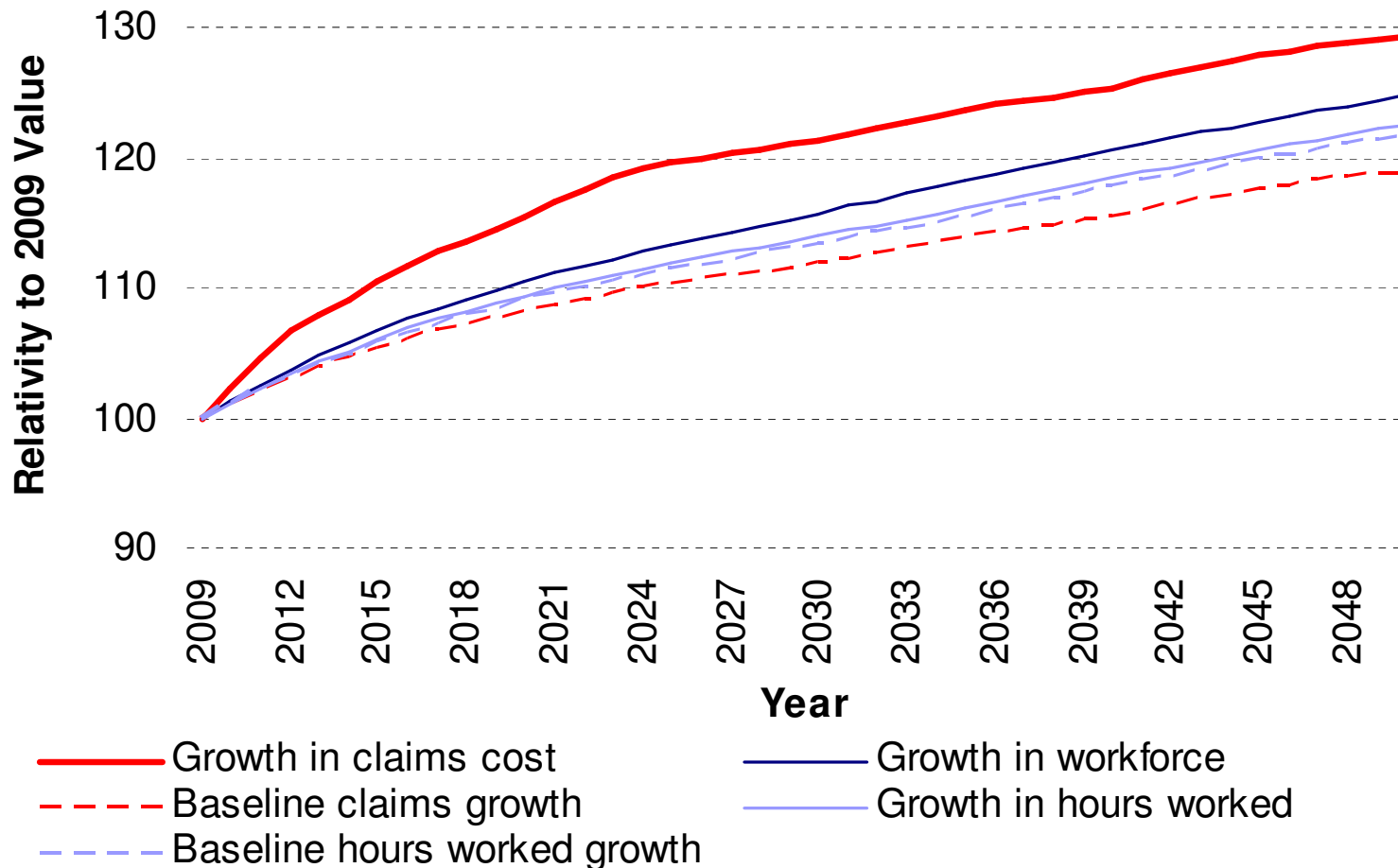
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Relative Change in Claim Cost and Workforce – Scenario 1





What Does it All Mean – Scenario 1?

- Annual claim costs to be around 10% higher than the Baseline case, with only a 1% increase in hours worked
- Costs increase because of:
 - higher average payment amounts
 - the already projected change in workforce profile (i.e. the changes in workforce profile become more significant as the average costs increase)
- One-off impact on outstanding claims liability – 5-10% of the income and related liabilities??

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Scenarios for Future Workers Compensation Costs:

**Scenario 2 – Reduced Frequency
Improvements Over Time, in
Addition to an Increased
Retirement Age**



Key Assumptions – Scenario 2: Reduced Frequency Improvements and Increased Retirement Age

- Reductions to the rate of frequency improvement, particularly for older age bands
- Claim sizes and workforce profile as per Scenario 1 (i.e. assumes an increased retirement age)

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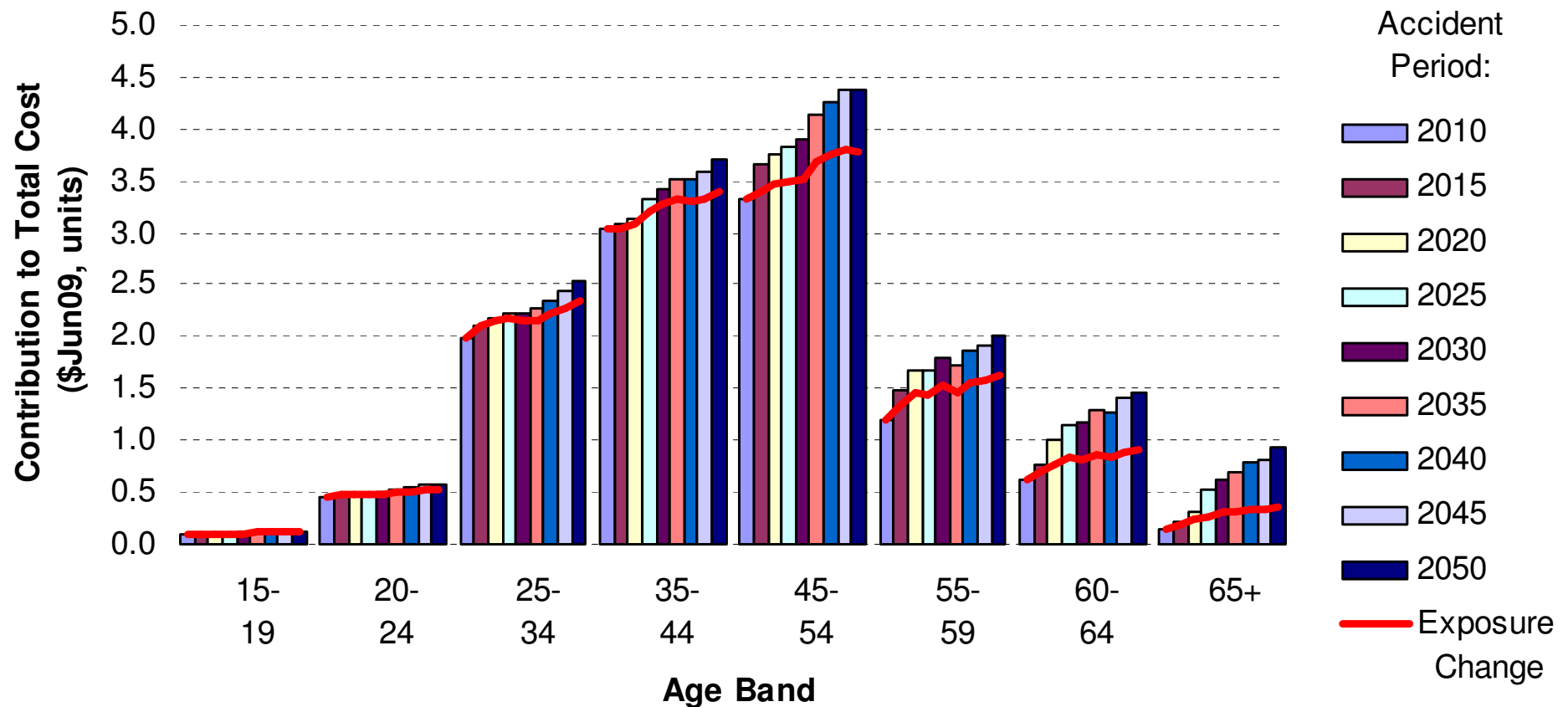
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Contribution to Total Cost Over Time – Scenario 2



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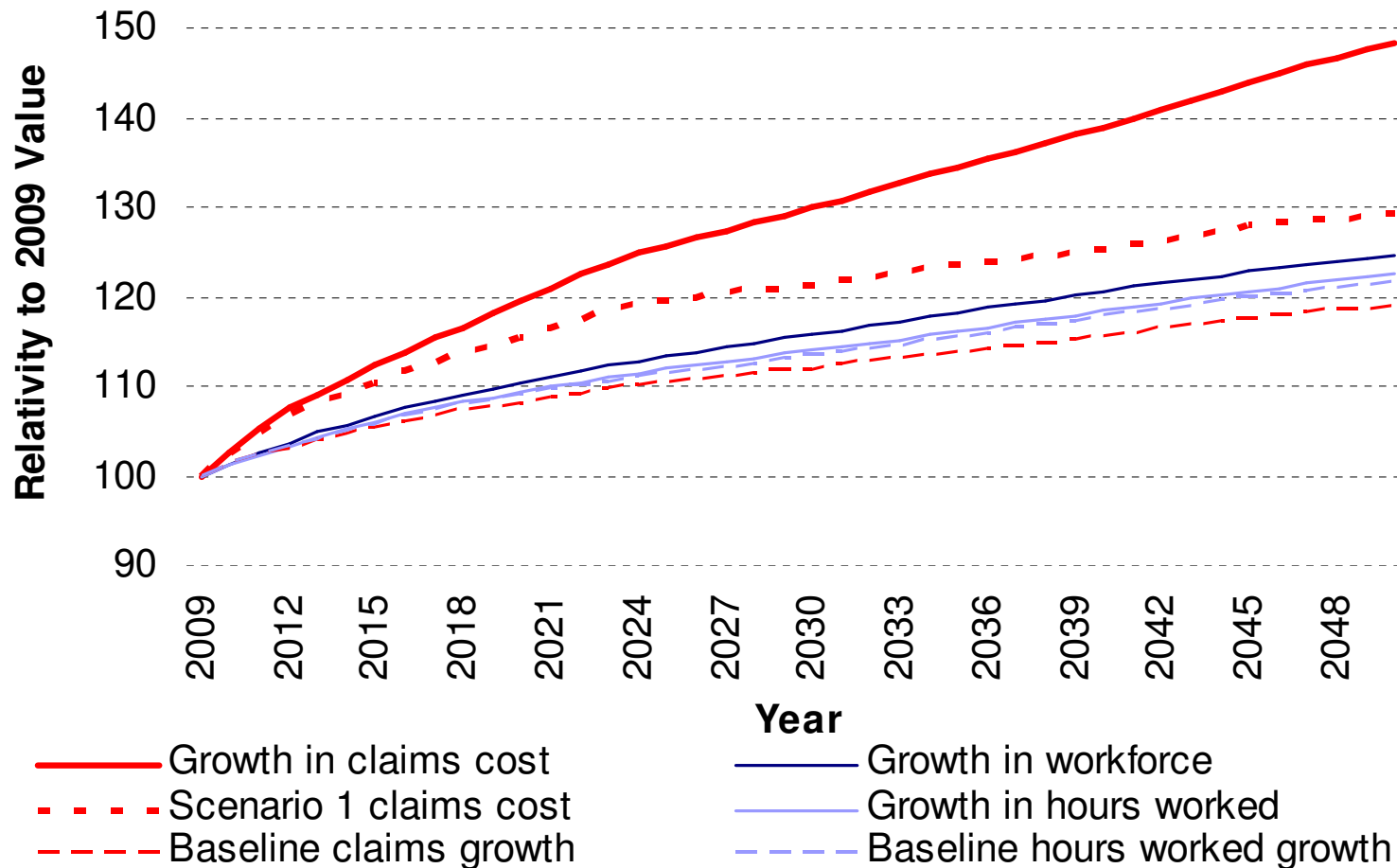
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Relative Change in Claim Cost and Workforce – Scenario 2





What Does it All Mean – Scenario 2?

- Claim costs increase by a further 19% above Scenario 1
- Total real claims cost growth of 48% over the projection period compares to growth in hours worked of 23% (i.e. claim cost grows by 25% more than the exposure base)
- Key message: if claim sizes continue to increase, claim frequency reductions are crucial to mitigating overall cost increases

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Implications for Scheme Design



Considerations for Scheme Design – Claims

- Management of older claims
 - ‘Pension’ mentality
 - Rehabilitation effectiveness
- Management of above inflationary cost increases
- Treatment of part time v full time workers (i.e. with more part time workers in future)



Considerations for Scheme Design – Future Incidence

- Proactive management of future injury and claim occurrence
- ‘Incentives’ to reduce claim occurrence and duration eg. legislative requirements, experience rating
- Changes to incidence and/or claim propensity for chronic and latent diseases with more older workers



Considerations for Scheme Design – Other

- Funding requirements
 - Cross subsidisation issues
 - Federal v State responsibilities
- Government intervention in labour market – should government attempt to influence/ encourage the provision of the additional ‘older’ workforce in any way?