



ROLE OF ACTUARIES IN UNIT PRICING AND MANAGING UNITISED FUNDS

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Introduction

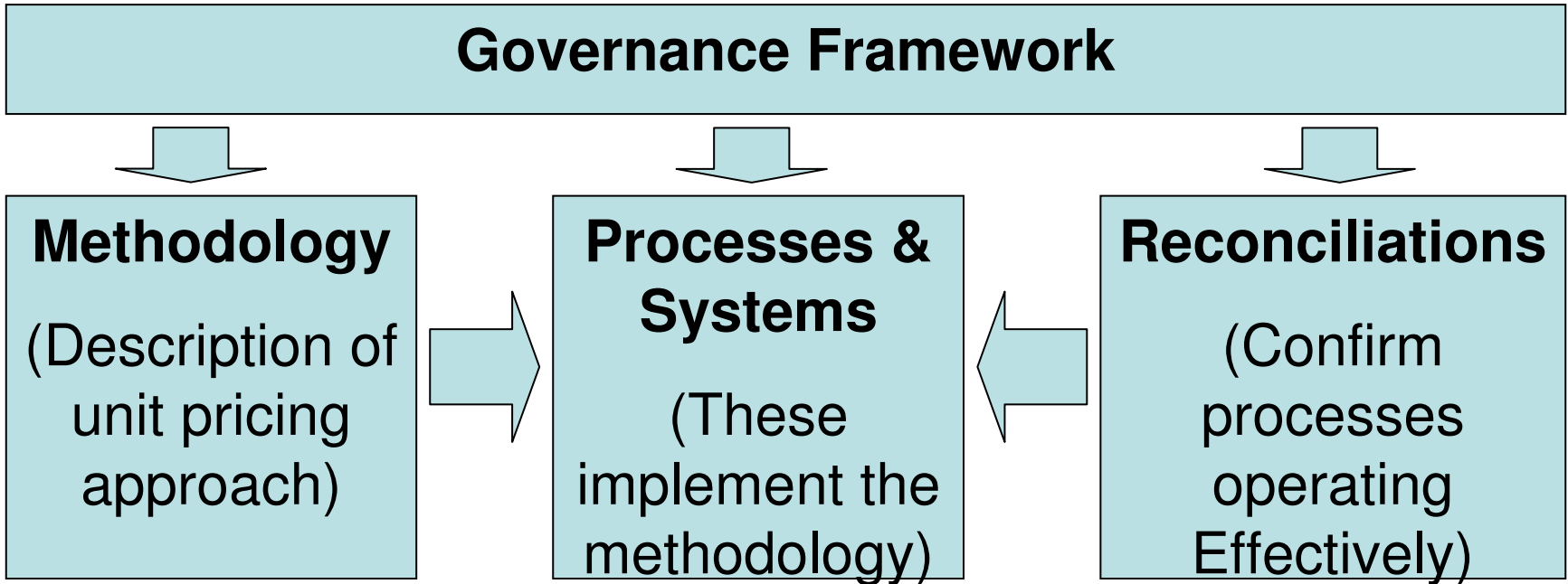
- Background
 - Overview different aspects of unit pricing.
- How can actuaries assist?
 - How relevant are actuarial skills to unit pricing?
 - Survey results – how have/should actuaries be involved?



Part 1 Background

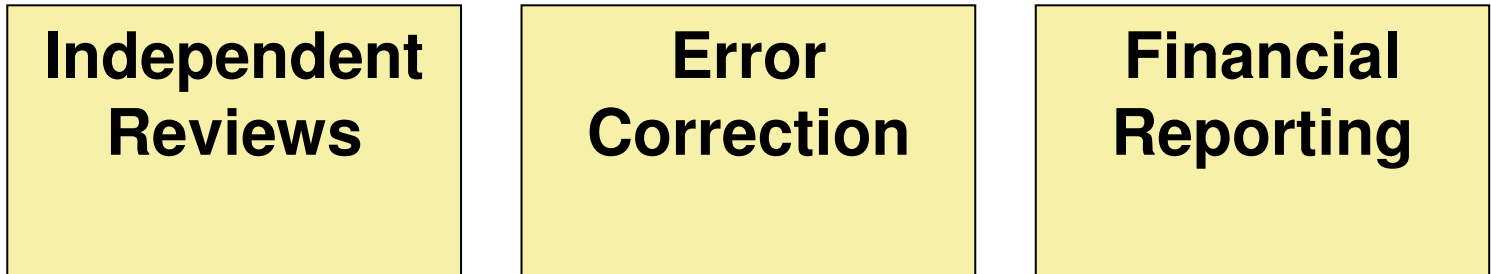
Operational View – Day-to-Day Calcs

Governance Framework



Core Components

Other Components



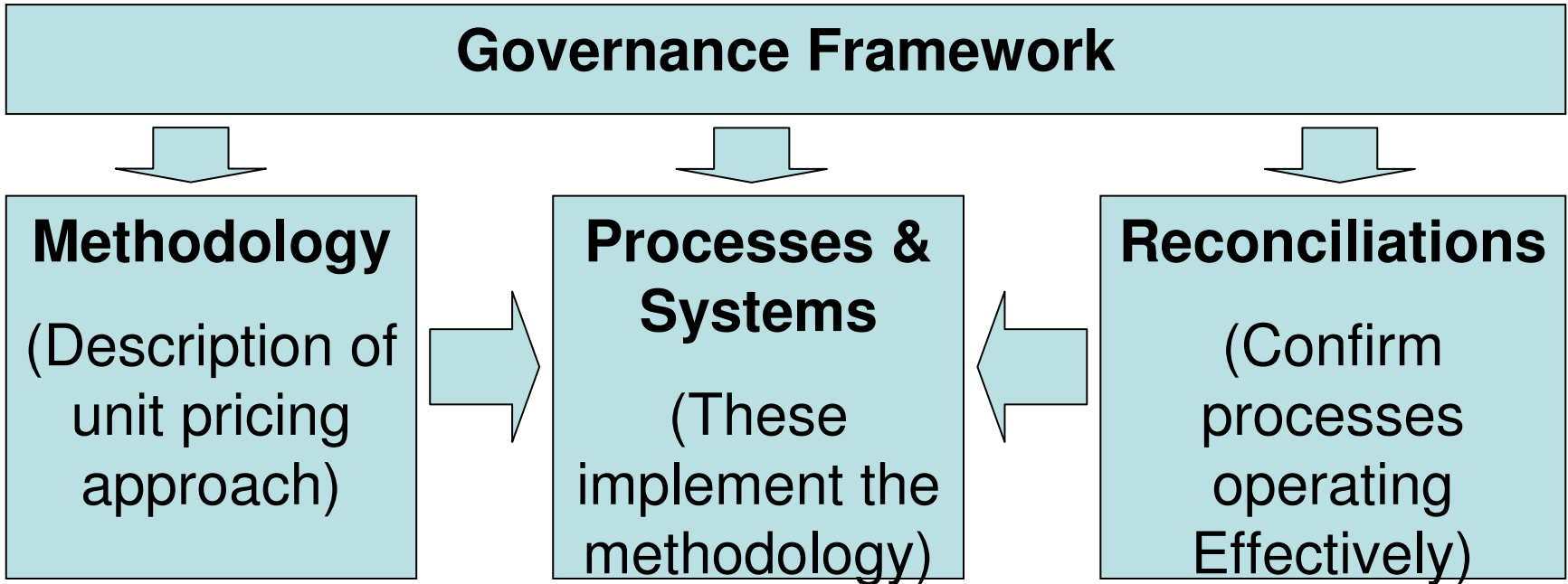


Methodology

- Specification for how unit price is calculated:
 - Technical calculation e.g. transaction spreads, forward vs historic, etc.
 - BUT also includes basis for tax provisioning and asset valuation
- Key features:
 - Equitable.
 - Thoroughly documented.
 - Consistent with legal and other documents e.g. trust deed, PDSs, etc

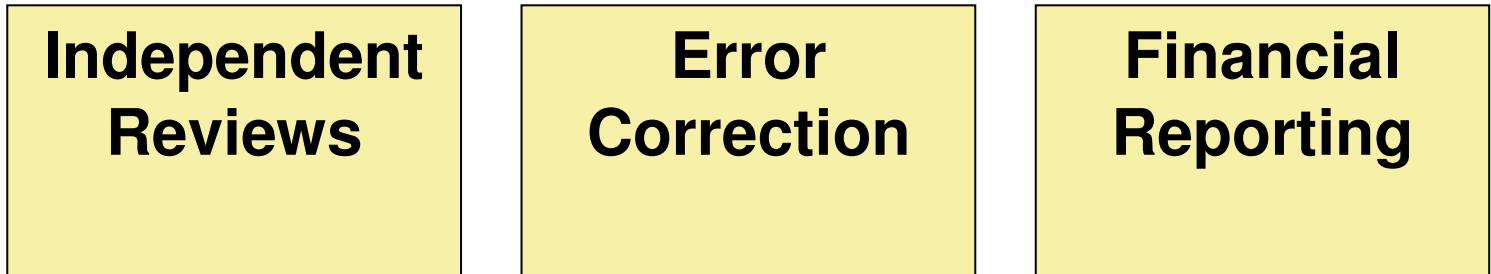
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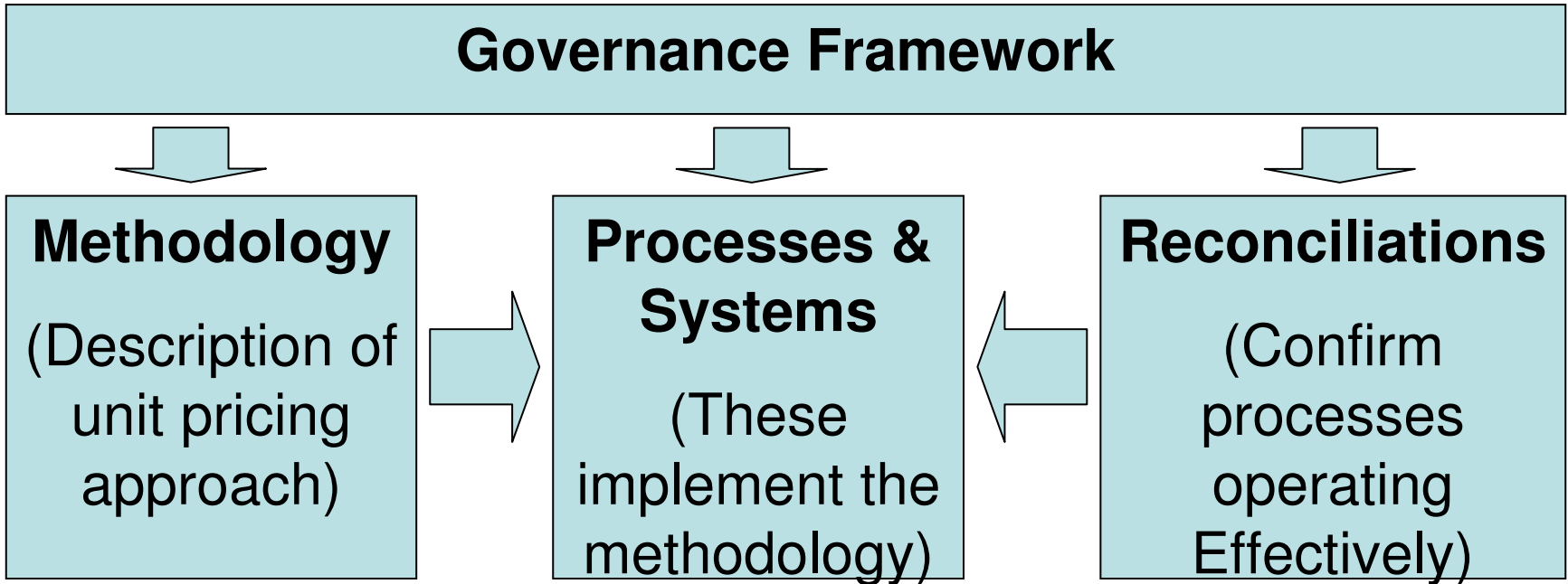


Processes and Systems

- Operational systems implement the methodology:
- Key features:
 - Consistent with documented methodology.
 - Information exchanges between systems are efficient.
 - Systems robust and secure.
 - Effective structure of business teams involved.

Operational View – Day-to-Day Calcs

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Core Components

Other Components

Independent Reviews

Error Correction

Financial Reporting



Reconciliations

- Purpose – confirm systems and processes worked effectively
- Key features:
 - Overall reconciliation framework – all data exchanges should be tested, i.e. no “gaps”.
 - Individual reconciliations:
 - Effective reporting – assist rectifying issues, not just identifying them.
 - Appropriate level of granularity.



Governance Framework

- Governance framework sits over the day-to-day aspects (methodology, process, recs)
- Purpose of governance framework:
 - Ensure all aspects operating effectively.
 - Promptly identify risks and errors.



Governance Framework (ctd)

- Key features:
 - Processes for identification, assessment and reporting of risks, e.g.
 - Risk register – including regular risk assessments and risk rating of methodology/processes.
 - Incident register
 - Escalation procedures for issues and errors
 - Documentation of all policies and procedures / for daily calcs checklists and evidence of review.
 - Training /resourcing and mgt key person risk.
 - Management of outsourced service providers.



Independent Reviews

- Periodic assessments – can cover any or all of methodology, processes, recs, risk governance framework.
- Purpose – identify where method not equitable/weaknesses in systems, controls.
- Key features:
 - Reviewer has necessary skills.
 - Management understand scope/limitations of review.
 - Recommendations from review are acted on.



Error Correction

- Occur when unit pricing error made.
- Purpose – make adjustments that restore unitholder to position “as if error never made”.
- Key features:
 - Requirement that no individual unitholder disadvantaged.
 - Correction thresholds do not provide a lot of tolerance.
 - Adjustments to approximate approaches not necessarily errors.

Part 2 How should actuaries be involved?



Summary of Actuarial Involvement

Governance Framework (No specific skills)

Methodology

(Managing equity & consumer fairness)

Processes & Systems

(No specific skills)

Reconciliations

(Analytical/modelling skills)

Independent Reviews

(Equity/modelling/diverse skill set)

Error Correction

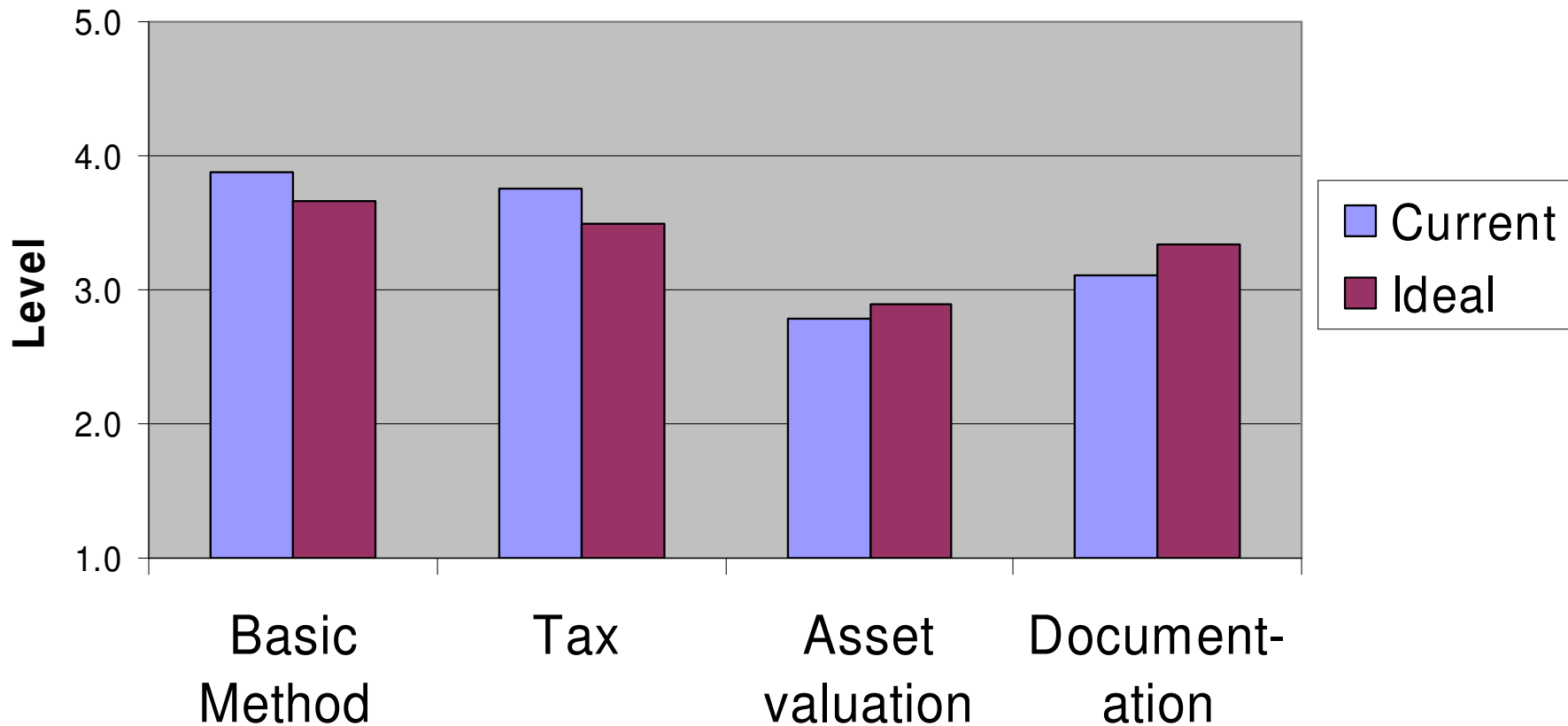
(Equity/modelling)

Financial Reporting

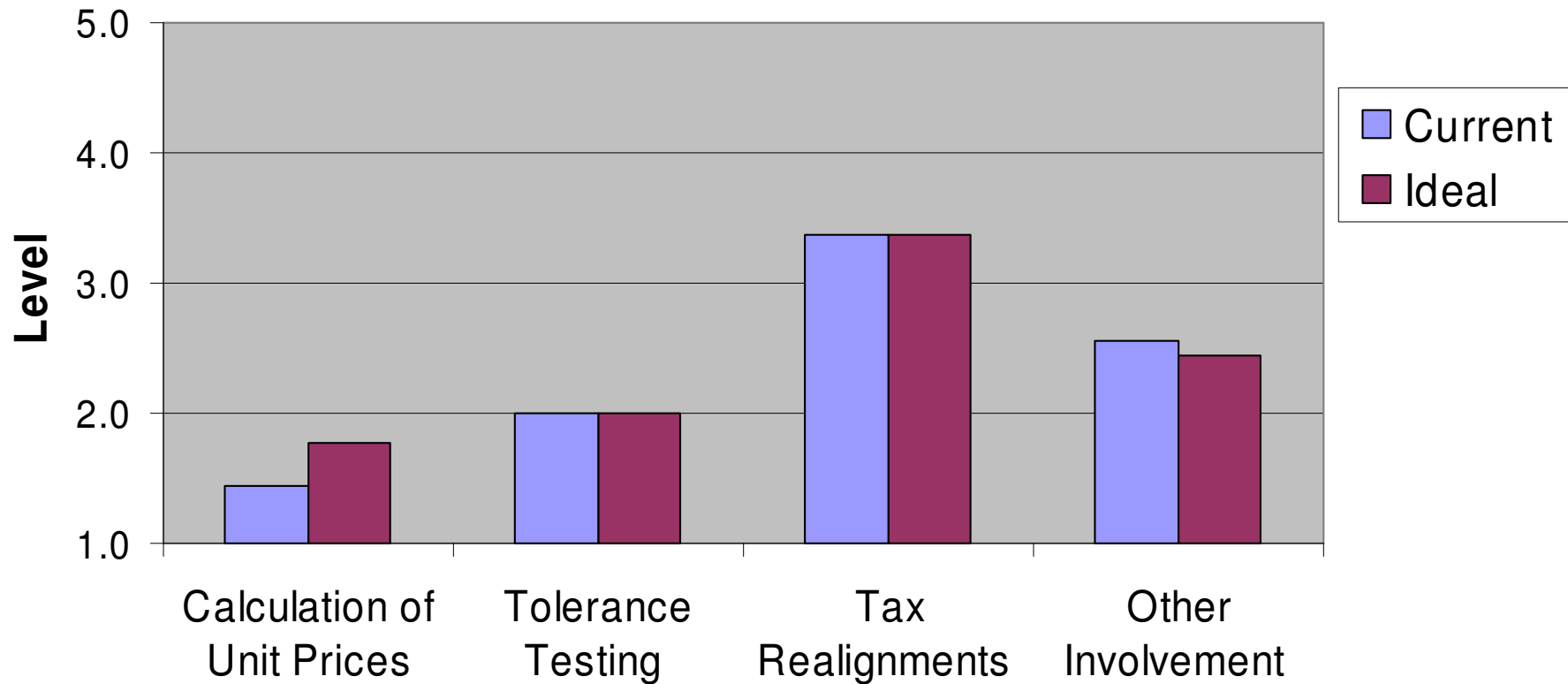
(communication)



Methodology (Q1.1) (Level of Actuarial Involvement)



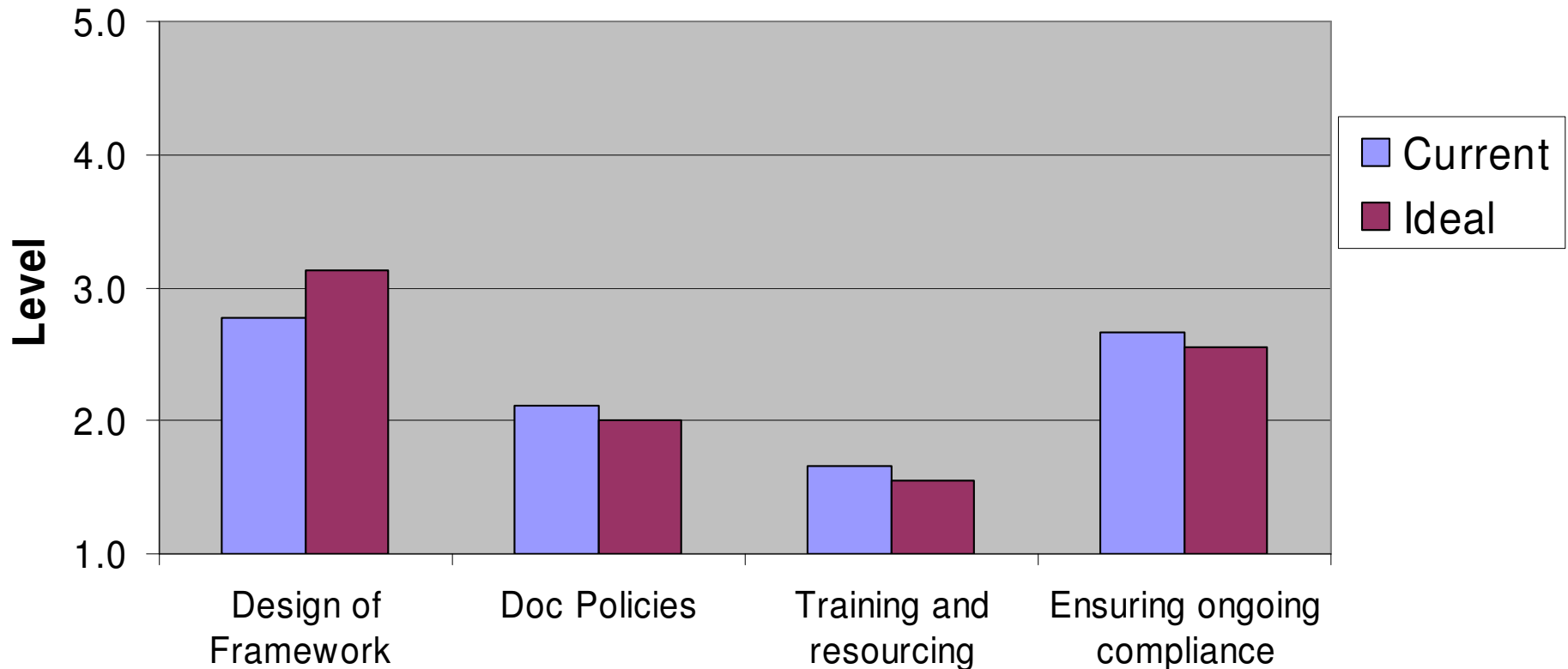
Daily Unit Pricing Process (Q1.2) (Level of Actuarial Involvement)



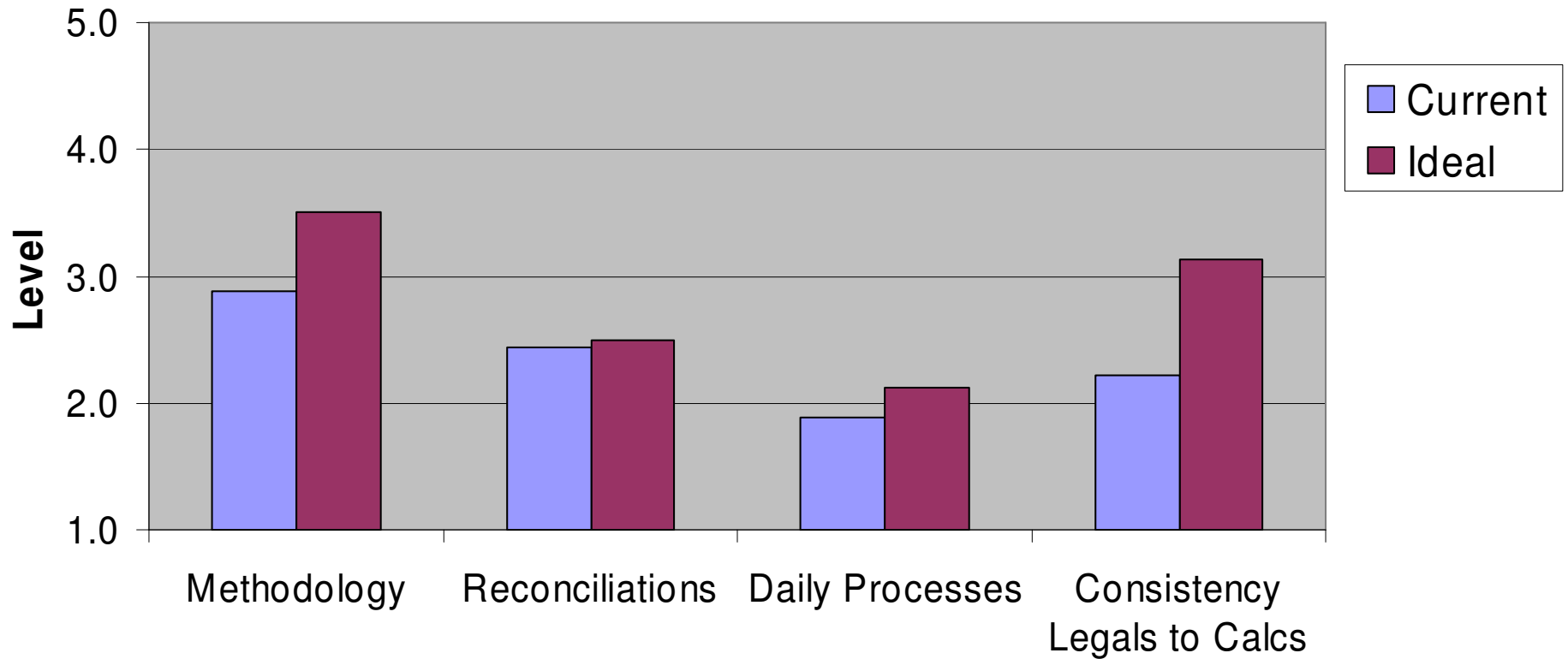
Reconciliations & Control (Q1.3) (Level of Actuarial Involvement)



Risk Management & Governance (Q1.4) (Level of Actuarial Involvement)

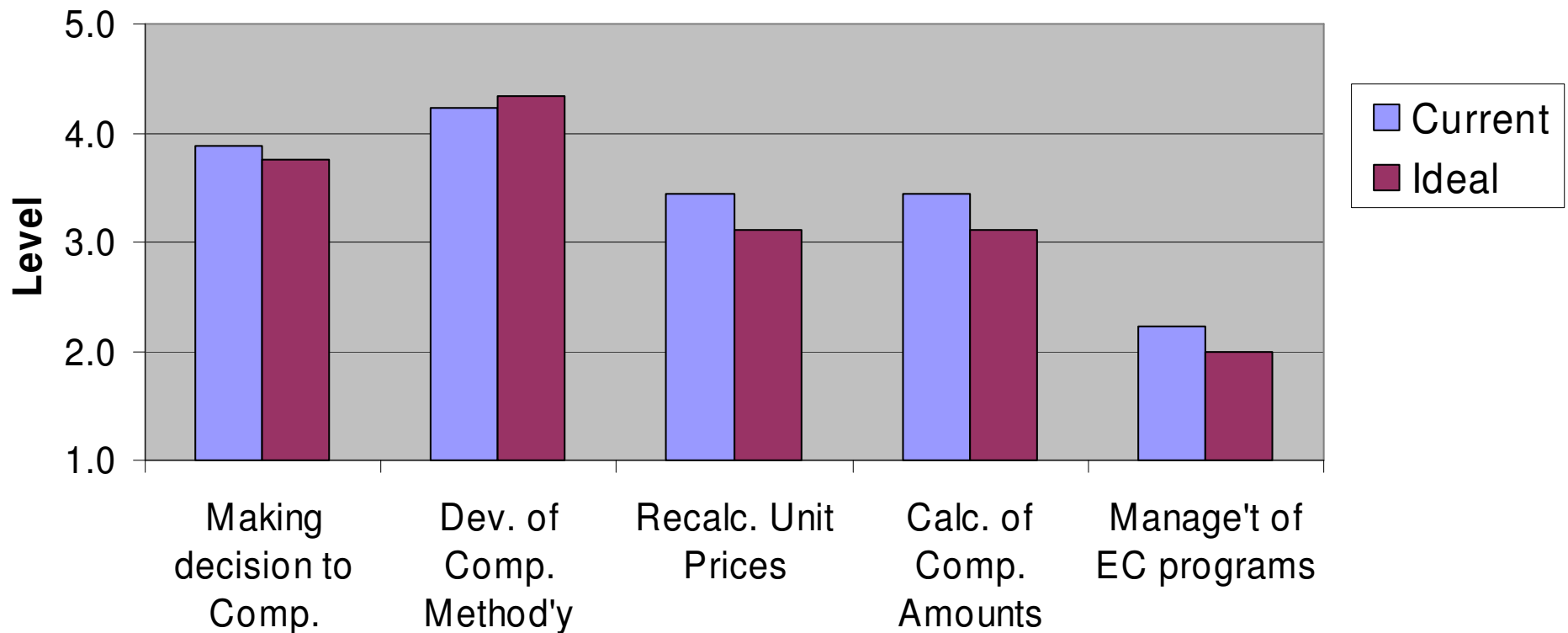


Independent Reviews (Q1.5) (Level of Actuarial Involvement)

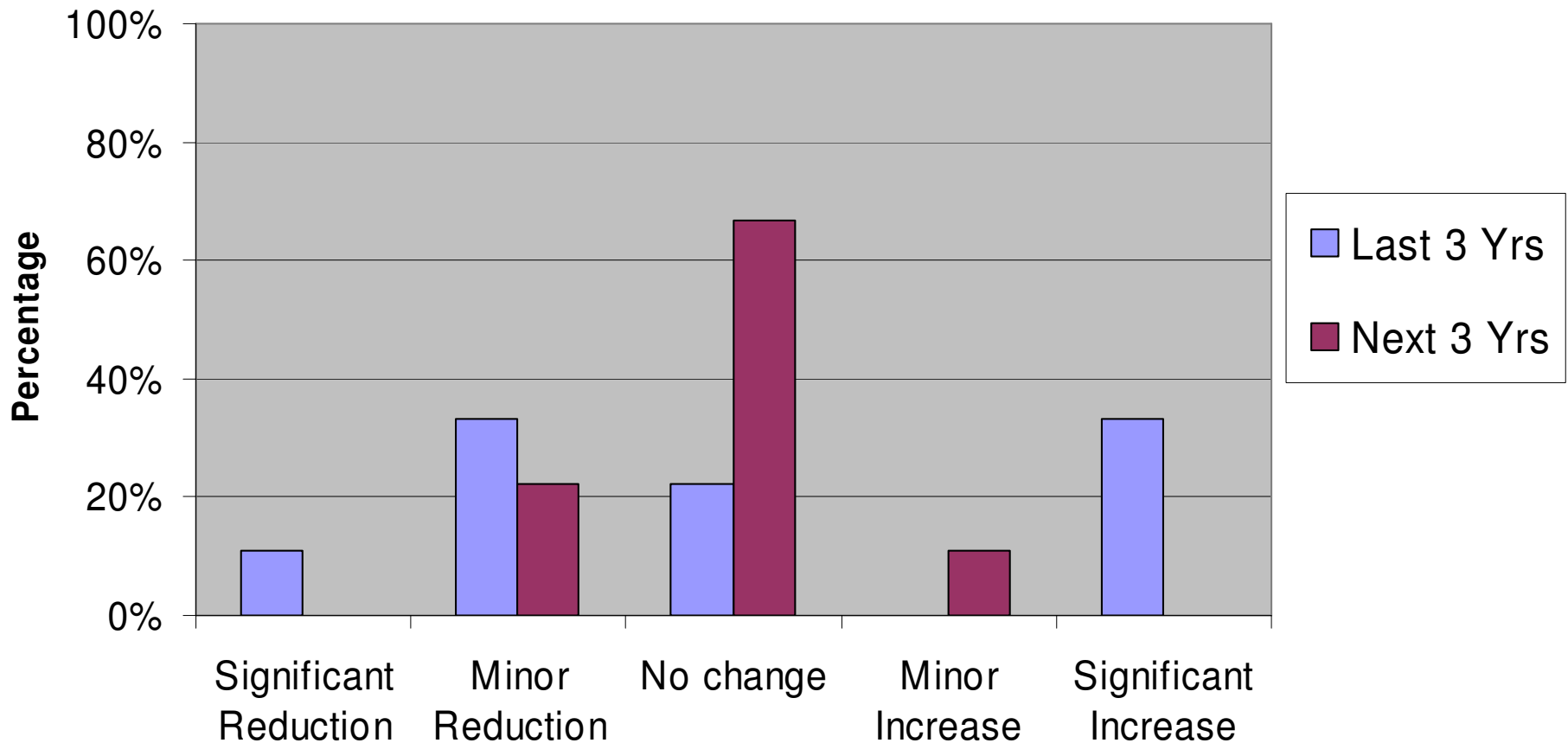




Error Correction (Q1.6) (Level of Actuarial Involvement)

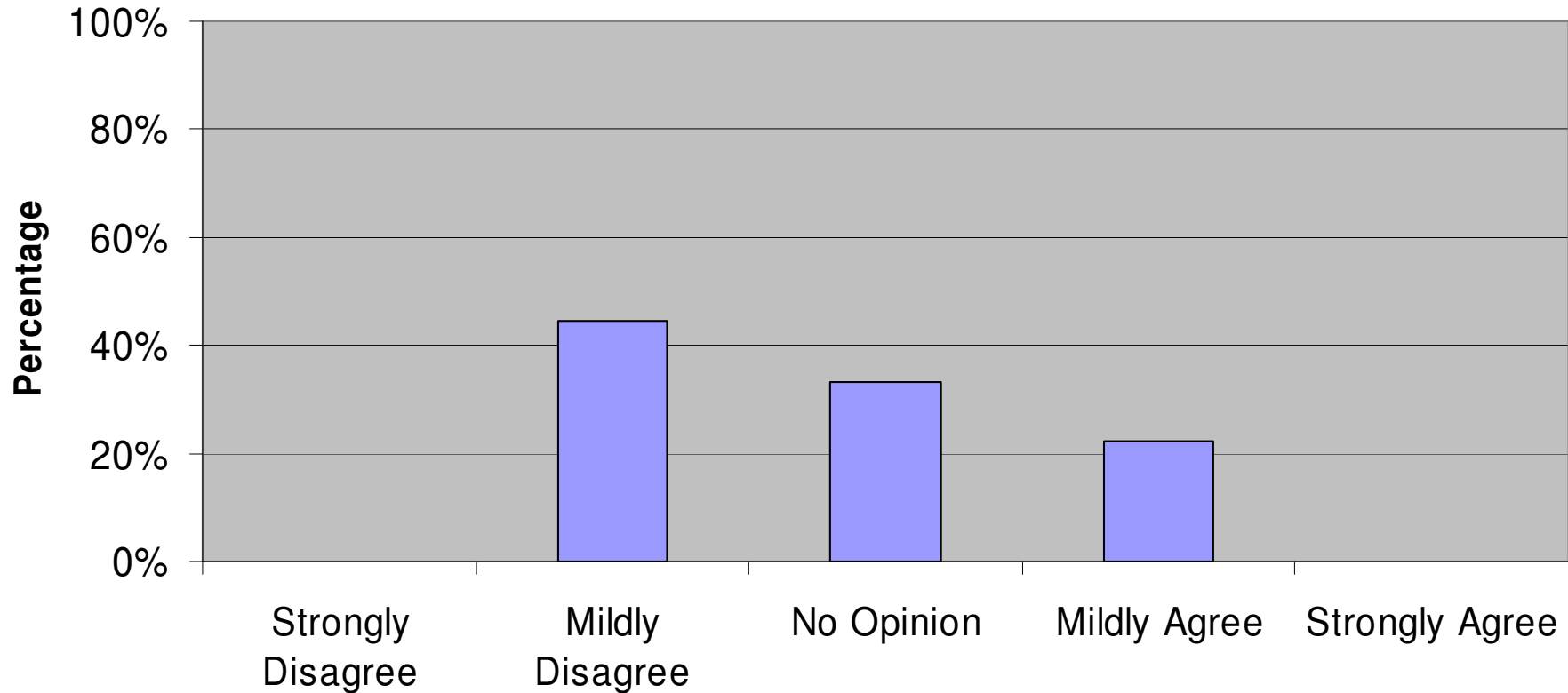


Actuarial Involvement Over Time (Q2)

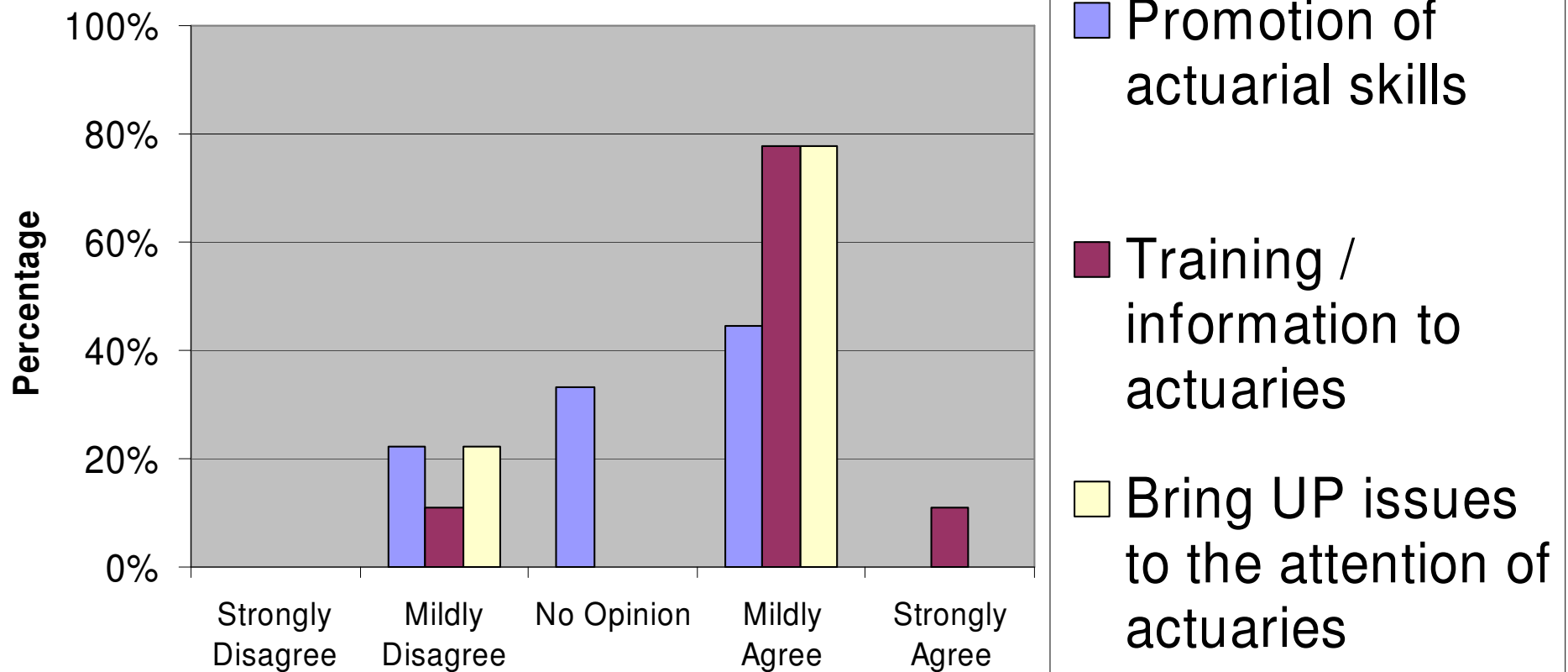




Would Increased Actuarial Involvement Prevented Unit Pricing Errors? (Q3)



IAAust Involvement in Unit Pricing? (Q4)





Survey Conclusions

- Actuaries have a role to play in complex areas:
 - Methodology/principles.
 - Tax methods – even regular realignments.
 - Compensation issues where errors occur
 - Unit pricing reviews.
- Jury out on whether increased actuarial involvement would reduce errors.
- Involvement in future little different to current.
- Some interest in getting further support from IAAust on unit pricing issues.



Unit Trusts/PSTs

- Survey focused on Actuaries working for Life Offices.
- Results suggest Actuaries within Life Offices are reasonably happy with level of involvement in UP.
- We believe results would be significantly different if:
 - Surveyed non-actuaries about actuarial involvement (Esp. UT/PST).
 - Surveyed actuaries working under UT/PST structures.
- Challenge for actuaries is to take skill areas identified and apply to UT/PST environment.