Protecting Consumers Against Risk: How Far Should It Go?

Dr. Wayne Simpson

Ms. Andrea Sherry

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Protecting Consumers Against Risk: How Far Should It Go?

- 2020 Rate Application (GRA) applies for approval of premiums based on its proposed Capital Management Plan (CMP) which
  - establishes "means and pathway to achieve 100% Minimum Capital Test (MCT) capital level for the Basic Rate Stabilization Reserve (RSR), as codified in the Reserves Regulation (M.R. 76/2019)
  - provides "assumed minimum regulatory target under the base scenario during the forecast period, used for determining satisfactory financial condition in the Dynamic Capital Adequacy Test (DCAT)" (GRA, Part I)

Protecting Consumers Against Risk: How Far Should It Go?

- proposed rate setting procedure under the CMP with the 100% MCT capital target represents
  - (i) a ***significant change*** in procedure regarding the ***target level or range*** of capital for Basic Insurance and the associated Rate Stabilization Reserve (RSR) and
  - (ii) a ***significant increase*** in the ***level of risk*** against which MPI ratepayers will be protected without evidence of increasing downside risk to MPI and to rates

(i) 100% MCT Standard is a Significant Change in Procedure

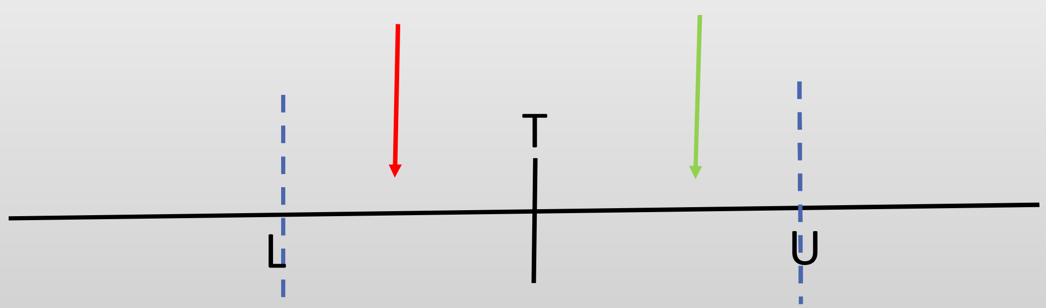
- Simpson-Sherry Report "The Role of the DCAT and Interest Rate Forecasting in the 2019 GRA" set out the chronology of methodological developments surrounding the establishment of RSR target levels/range:
  - ***Kopstein Report*** (1988): RSR range of 10% to 20% of premiums
  - ***Operational and Investment Risk Analysis*** (RA/VaR, 2000)
    - 97.5% C.I. or 1-in-40-year risk of insufficient RSR to cover underwriting losses
    - 1-in-40-year standard for risk tolerance endorsed by Board Order 150/07
  - ***Dynamic Capital Adequacy Test*** (DCAT, 2010)
    - initially assessed future financial condition of Basic
    - became MPI's justification for RSR target level using 1-in-40-year risk standard
    - risks substantiated with historical evidence and significant consensus achieved
    - utility for setting Basic target capital recognized by Board Order 162/16 (2016)

(i) 100% MCT Standard is a Significant Change in Procedure

- Minimum Capital Adequacy Test (MCT, 2005)
  - MPI recommended RSR target range of 50% to 100% MCT in 2007 GRA
- MCT recognized by OSFI for ***private casualty insurers*** in a ***competitive insurance industry*** to prevent insolvency
  - but MPI is a ***public crown corporation*** with a ***monopoly over Basic Insurance?***
  - MPI has a ***different risk profile*** so what MCT would apply?
- proposal to base RSR target range or upper threshold on MCT explicitly rejected in favour of DCAT scenario testing in Board Order 162/16 (2016)
- current rate application relies on Cabinet *Reserves Regulation* to use 100% MCT to set a target capital level, not a range, for Basic under the CMP
  - natural progression to link target capital level to identifiable risks is reversed
  - eliminates useful role of DCAT in setting target capital level (CAC(MPI) 1-15)
  - DCAT would only "assess satisfactory financial condition and support enterprise risk management" (GRA, RSR.7) in some unspecified fashion

(i) 100% MCT Standard is a Significant Change in Procedure

- focus shifts to ***target capital level*** rather than ***target capital range***
  - RSR range (lower and upper thresholds) generally accepted 1988-2019 GRAs
- argument for a range remains clear and sensible
  - if Basic capital falls within the range (L to U), no action is called for
  - if capital falls below lower threshold (L), rebuild capital
  - if capital exceeds upper threshold (U), provide a premium remittance
- reverting to a target capital level (T) invites rate instability
  - premiums would be volatile, driven by inevitable deviations from target, rather than stable within a range (L to U)



(ii) 100% MCT is a Significant Increase in Risk Level

- Long established purpose of RSR to "***protect motorists*** from rate increases that would otherwise have been necessary due to unexpected variances from forecasted results and due to events and losses arising from non-recurring events or factors" (GRA, RSR.3)
- Focus to prevent "rate shock" not protect MPI's capital position
- Earlier GRA hearings/conferences focused on understanding downside risks, quantifying them, and relating then to some reasonable motorist risk tolerance standard (1-in-40-years)
- RSR involves fundamental trade-off:
  - Motorists can have more and more rate stability insurance by paying higher premiums and having MPI retain the surplus in the RSR
  - Absolute protection prohibitively expensive and would divert motorist disposable income into MPI coffers at the expense of other goods and services, potentially misallocating resources
  - Proper resource allocation requires determination of motorists general appetite for risk in terms of "rate shock," or their risk tolerance

(ii) 100% MCT is a Significant Increase in Risk Level

- What is an Appropriate Risk Tolerance Standard?
- Board Order 150/07 endorsed the one-in-forty-year standard in 2007:
  - "The RSR should be large enough to be able to withstand an unforeseen loss of a magnitude not anticipated to occur more than once in 40 years. In the event of a loss of such a magnitude depleting the RSR, possibly even driving it into a deficit, the Board would examine with the Corporation and interveners options to rebuild the RSR, which could include premium surcharges over a period of years. In the past, when the situation warranted it, the Board approved modest rate surcharges for a series of years, just as suggested above."
- 1-in-40-year standard is a widely adopted statistical convention, i.e. some risk (in hypothesis testing) is inevitable, reducing risk is costly, and a suitable balance is 2.5% (risk of rejecting a hypothesis that is true)

What is an Appropriate Risk Tolerance Standard?

- Evidence on motorists’ risk tolerance limited to Probe Research (2015) study commissioned by CAC:
  - “Participants were asked to indicate the magnitude of event from which they wish to be protected by placing their name on a line with a 1-in-200 year event on the right hand side of the scale and a 1-in-1 year event on the left hand side of the scale. It was further explained that the premiums associated with coverage for adverse events that can be expected every year would be minimal, while there would be a much higher cost associated with premiums for an event occurring once in every 200 years. . . Most [females] were comfortable having coverage sufficient to protect them against a 1 in 10 year event, with most [men] preferring coverage near 1 in 20 years. . . An older gentleman indicated that his satisfaction with 1 in 5 years protection was premised on his advanced age and the unlikelihood that he would live long enough to require more significant coverage”
- Would be very hard to argue from these responses that risk tolerance in the focus groups exceeded the one-in-forty year standard

(ii) 100% MCT is a Significant Increase in Risk Level

- 100% MCT implies a much higher tolerance for risk than the 1-in-40-year standard of previous GRA/technical conferences discussions
  - 2015 DCAT was unable to determine the risk tolerance associated with the 100% MCT target proposed for the upper threshold since 5000 simulations did not produce a single case of negative Total Equity balance, implying the 100% MCT criterion corresponded to a probability level of less than 1-in-5000 years or 0.02% probability of occurrence
- Board Order 162/16 (2016):
  - ". . . the Board withdraws its support of the use of the MCT and a threshold MCT ratio of 100%. The Board is concerned that the degree of conservatism implied by the Corporation's proposal may be excessive based on the Corporation's scenario testing at the more extreme percentile levels of possible outcomes . . ."

(ii) 100% MCT is a Significant Increase in Risk Level

- Without consultation with stakeholders, MPI announced that “Going forward the chief actuary will select assumptions that more closely align ***with the risk appetite of the MPI BoD***” including “a 1-in-100 year (99^{th} percentile) outcome level” (GRA RSR7.2)
  - CAC(MPI)1-15(a): 1-in-100-year risk tolerance is more closely aligned with the 100% MCT criterion for capital targeting
- Risk appetite of motorists replaced with risk appetite of the MPI Board of Directors at a much more conservative level that justifies higher premiums for motorists and a higher RSR
  - What are the (premium) risks to motorists beyond the adverse scenarios quantified in various DCAT reports over the past decade?
  - “Risk Management Framework” section lists the top 11 risks to MPI as determined by the Enterprise Risk Management Committee but only 2 are quantified using DCAT methodology

Conclusions

1) The proposed rate setting procedure under CMP with the 100% MCT represents a significant change in the procedure to establish target capital for Basic Insurance and the Rate Stabilization Reserve, since the procedure has relied on POP and DCAT methodologies to set a target capital range, not a level, up to now
2) The proposed rate setting procedure under CMP with the 100% MCT capital target level also represents a significant increase in the level of risk against which MPI ratepayers will be protected without new evidence of increasing downside risk to MPI and rates
3) Holding capital at the 100% MCT level has no basis in the DCAT modelling completed by the Corporation and would lead to excessive levels of capital held

Recommendation

The rate setting procedure should continue to use the DCAT results with a 1-in-40 year adverse scenario as the benchmark (or range midpoint) to determine a target range for the RSR