Overview **5M**

With all the necessary components for ratemaking prepared, we can move on to calculating rate changes for future policies.

The ratemaking approach we'll cover on this exam is called ***manual rating***. Under this approach, risks with similar characteristics are grouped together, and rates are calculated based on the estimated future losses of the group. This rating method does not use specific loss experiences of the individual insureds to determine the premium.

In this section, we will look into the first step of the manual rating approach, which is calculating the indicated overall average rate and rate change. The subsequent steps will be covered in a more advanced exam.

Coach's Remarks

In ratemaking, the term **indicated** refers to "as indicated by the data". For example, "an indicated average rate change of +10%" means "based on the study of the data, we need to increase the rates, on average, by 10%".

Before calculating a rate change, it's important to understand the goals of creating a new rate. Here are the essential and non-essential (but highly desirable) objectives of ratemaking:

ESSENTIAL

- **Rates must cover expected losses and expenses.** In other words, expected income, which includes both premiums and investment income, must equal or exceed expected losses and all expenses associated with doing business. This means that rates must be adequate both on a per-class basis and for the whole book. In particular, each cohort of policyholders should pay for its expected costs.

- **Rates must make adequate provisions for contingencies.** In addition to covering expected costs, rates should be high enough to cover unexpected

costs.

- **Rates must encourage loss control.** Rates should be structured so that policyholders are incentivized to avoid risk. For example, many auto insurance companies give discounts for safe drivers, good students, etc. Encouraging lower-risk behaviors also helps improve society by reducing accidents and injuries.

- **Rates must satisfy regulators.** Regulators require rates to be adequate, not excessive, and not unfairly discriminatory. They may refuse to allow a rate change if it is deemed to be inappropriate or based on subjective methods. Thus, it is important for an actuary to support proposed rate changes with data and documentation.

NON-ESSENTIAL

- **Rates should be reasonably stable.** A stable rate reduces skepticism among consumers. Insurers can utilize reinsurance to spread out the effects of large losses over time.

- **Rates should be reasonably responsive to changes.** Changes that have an immediate and permanent impact on rates, such as changes to rate regulations, should be adjusted for quickly.

- **Rates should be simple and easy to understand.** It becomes easier to promote loss control when policyholders understand why a rate would increase or decrease. Besides, a complex system is expensive to maintain and makes the product hard to "sell" to the stakeholders, e.g., senior management, regulators, agents, etc.