

## 6.5 Summary

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The **Cape Cod method**, also called the **Standard-Bühlmann method**, is commonly utilized by reinsurers and is applicable to all lines of insurance, including both short-tail and long-tail lines. It operates on the assumption that unreported claims will develop based on expected claims.

The Cape Cod method differs from the Bornhuetter-Ferguson method in how the expected claim ratio is derived:

$$\text{Cape Cod ECR} = \frac{\sum \text{Reported Claims}}{\sum \left( \frac{\text{On-Level}}{\text{Earned Premium}} \times \% \text{ Reported} \right)}$$

Additional key facts:

- Only reported claims are used to estimate ultimate losses.
- Data from the year in which the estimate is made is **included**.
- Claims ratios must be adjusted to the same level and year of estimation, as needed.

## Advantages/Disadvantages

An advantage of the Cape Cod method, when compared to the development technique, is its resilience against early random fluctuations in the development of an accident year or time interval.

Disadvantages include the use of on-level premiums and the requirement of having sufficient and credible enough reported claims data, which results in the Cape Cod method not being as suitable as the BF method when data is thin or volatile.

## Analyzing the Cape Cod Method

Description	Impact on Cape Cod Method
Increase in claim ratios	Underestimates ultimate claims, though not as much as the BF method would since the Cape Cod ECR is based on reported claims through the valuation date.
Increase in case outstanding adequacy	Overestimates ultimate claims by less than the development method but more than the BF method.

Description	Impact on Cape Cod Method
Change in product mix	Can be distorted when the changing lines of business have varying development patterns.