

What is Hindsight IBNR?

(For P&C Insurance)



Definition #1

Hindsight IBNR is the amount of IBNR that *would have been* indicated at a specific evaluation date *if* ultimate loss was selected equal to that at the later evaluation date.

$$\text{Hindsight IBNR}_{\text{Old Eval}} = \text{Ult Loss}_{\text{New Eval}} - \text{Incurred Loss}_{\text{Old Eval}}$$

Definition #2

Hindsight IBNR equals IBNR at a specific evaluation date, adjusted to reflect the benefit of hindsight, specifically with respect to the change in selections of ultimate loss since the original evaluation date.

$$\text{Hindsight IBNR}_{\text{Old Eval}} = \text{IBNR}_{\text{Old Eval}} + (\text{Ult Loss}_{\text{New Eval}} - \text{Ult Loss}_{\text{Old Eval}})$$

Reconciling the Definitions

In **definition #1**, substitute the following definition of **Incurred Loss**_{Old Eval} :

$$\text{Incurred Loss}_{\text{Old Eval}} = \text{Ult Loss}_{\text{Old Eval}} - \text{IBNR}_{\text{Old Eval}}$$

After doing so, **definition #1** easily reconciles to **definition #2**:

$$\begin{aligned} \text{Hindsight IBNR}_{\text{Old Eval}} &= \text{Ult Loss}_{\text{New Eval}} - \text{Incurred Loss}_{\text{Old Eval}} \\ &= \text{Ult Loss}_{\text{New Eval}} - (\text{Ult Loss}_{\text{Old Eval}} - \text{IBNR}_{\text{Old Eval}}) \end{aligned}$$

$$\text{Hindsight IBNR}_{\text{Old Eval}} = \text{IBNR}_{\text{Old Eval}} + (\text{Ult Loss}_{\text{New Eval}} - \text{Ult Loss}_{\text{Old Eval}})$$