

Bornhuetter–Ferguson as a General Principle of Loss Reserving

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Abstract

It is the purpose of this paper to demonstrate that a straightforward extension of the Bornhuetter–Ferguson method provides a general principle comprising various methods of loss reserving which are based on run-off triangles. The most prominent methods underlying the Bornhuetter–Ferguson principle are the chain–ladder method and the more general loss–development method, as well as the additive method and the more general Cape–Cod method.

Besides its force of unifying these and other methods of loss reserving, the Bornhuetter–Ferguson principle can be used also to generate new methods of loss reserving, to evaluate the range of predictors depending on different sources of information, and to compare the portfolio under consideration with the market portfolio.

The present paper summarizes results of Schmidt [2006] and of Schmidt and Zocher [2008]; see also Radtke and Schmidt [2004].

Keywords: Additive method, Bornhuetter–Ferguson principle, Bornhuetter–Ferguson method, Cape–Cod method, chain–ladder method, development pattern, loss–development method, multiplicative model.