

This thesis is dedicated to basic methods of calculating IBNR reserve estimate. The following approaches are introduced: chain ladder method, Mack's chain ladder method and Munich chain ladder method. Last two of them enable to calculate mean squared error of reserve estimate instead of only a point estimate. The teoretical bases are always described and then all methods are applied to real data of claims. Finally, we compare introduced methods from the point of view of their applicability in practice and we calculate run-off analysis of reserve estimates.