One of the most critical problems in casualty property insurance is to determine an appropriate reserve for the incurred but unpaid losses. The provisions are the largest part of the liabilities of a non-life insurer. The global provisions are often determined under the independence assumption. Firstly, we suppose a dependence between all the observations that belong to the same calendar year for all lines of business using multivariate Archimedean copulas. Secondly, we suppose another dependence structure that links the calendar years of different lines of business by using hierarchical Archimedean copulas. When applied to data, our models provide a better fit than existing models, and offer a better and more realistic interpretation of the dependence between the lines of business.