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Utilisation des méthodes de Lee-Carter et Log-Poisson pour l'ajustement de tables de mortalité dans le cas de petits échantillons

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(Submitted on 12 Jan 2010)

The aim of this paper is to study the construction of prospective mortality tables from a low number of persons subjected to risk. The presented models are the Lee-Carter and log-Poisson methods respectively. The low number of people subjected to risk, particularly noticed for the persons who are getting on, implies the use of an extrapolation method for the mortality rates. The Lee-Carter and log-Poisson methods constitute twodimensional models, taking the year and the age into account to calculate the mortality rates. The methods suggested are applied to a real data set. The prospective tables, built in this way, allow to project the rates' evolution in the future, extrapolating the temporal constituent. And then, it allows to compare this projection with the evolution predicted for the French population in its entirety. You determine the best method through the nearness of the smoothed rates in comparison with the raw rates and essentially through the caution of these models for the life annuities' calculation. The results stemed from these methods are too confronted with the mortality rates obtained through a method of logistic fits.

Subjects:	**Statistical Finance (q-fin.ST)**
Journal reference:	Bulletin Fran\c{c}ais d'Actuariat (2007) 118...146
Cite as:	**arXiv:1001.1916v1 [q-fin.ST]**

Submission history

From: Frederic Planchet [view email] [via CCSD proxy]
[v1] Tue, 12 Jan 2010 15:43:35 GMT (570kb)

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