Some Stochastic Asset Models (or Economic Scenario Generators) are based on a continuous process, so can fairly easily be simulated for any chosen step size - day, week, month, year. But such models often do not capture the long term characteristics of the market. Other Stochastic Asset Models (such as the Wilkie model) attempt to represent the long-term features of the market, but are specified only for long time steps, such as years.

Sometimes one would like to simulate them over shorter time steps - months, weeks, days. It is not always easy to find a short-term model with the same long term characteristics as the basis yearly model, but stochastic interpolation is available as a way of "filling in the gaps", once a yearly model has been specified and simulated.

The obvious ways of stochastic interpolation are Brownian Bridges (corresponding to random walks) and Ornstein-Uhlenbeck (O-U) bridges (corresponding to AR(1) models) and they often work nicely. But sometimes we find that stochastic interpolation of the obvious variables in the obvious ways gives unsatisfactory and rather curious results. This paper explores this problem, applying it to the Wilkie Model as an example, provides solutions, and also discusses some other interesting features of stochastic interpolation.