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# A Finite Difference Approach to the Valuation of Path Dependent Life Insurance Liabilities

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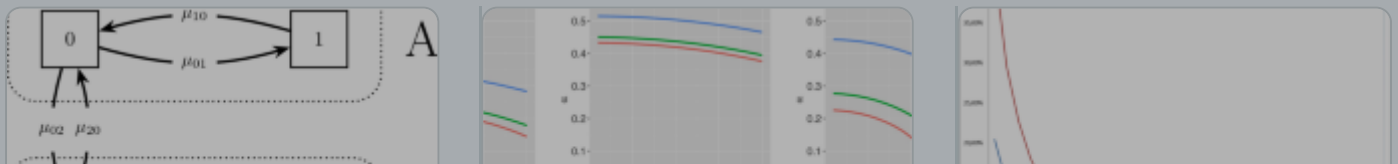
period. This path-dependence prohibits the derivation of closed-form valuation formulas but we demonstrate that the dimensionality of the problem can be reduced to allow for the development and implementation of a finite difference algorithm for fast and accurate numerical evaluation of the contracts. We also demonstrate how the fundamental financial model can be extended to allow for mortality risk and we provide a wide range of numerical pricing results.

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