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Ruihua Liu* (ruihua.liu@notes.udayton.edu), 300 College Park, University of Dayton, Dayton, OH 45469. *The Valuation of Guaranteed Equity-Linked Life Insurance with Option of Early Surrender.*

In this work we study the valuation of equity-linked life insurance with guaranteed minimum benefits and with the option of early surrender. These guarantees are embedded options of American type and unlike stock options, whose prices are paid up front, are paid via a continuous deduction of the investment value until the termination of contract. We value the contracts under a regime-switching diffusion model for the equity-fund price and a regime-dependent interest rate. We formulate the valuation as an optimal stopping problem and derive an analytical solution for a special two-dimensional case. (Received September 09, 2007)