A NEW EUROPEAN LOGISTIC-TYPE OPTION PRICING MODEL.

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ABSTRACT. This paper aims at studying properties of a new option pricing model inspired by logistic equations. The model belongs to a generalized new family of valuation models developed by Londoño [2]. We prove that the model proposed is well defined in the sense that the sde's that define the model has unique non-explosive solutions, is free of arbitrage opportunities and prove that the proposed model is (state) complete. We also compare calibration results with the ones obtained by the model proposed by Heston [1]. The calibration process will be run on option prices from the CBOE starting in December 1997 until December 2008. Finally we will describe some of the model characteristics.

REFERENCES

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