Options on the Bill of Lading

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Abstract

Abstract. The bill of lading is a commonly known document in sea freight and transportation logistics, given by the transporter, who is hired by (B), to (S) at the loading of goods on the deck of a cargo, describing the delegation of responsibility of the goods to the transporter, the good itself and many other considerations. The bill of lading option (BoL option) is an OTC contract between two counterparts: a buyer (B) and a seller (S). In the contract, (S) will set up the date and options for (B) to choose, whereas (B) has the right to choose from some assigned options before the deadline. In this report, we study the payoffs and decisions of two types of bill of lading options using Schwartz-Smith model, geometric Brownian model and Ornstein-Uhlenbeck process. We investigate their sensitivities with respect to the parameters change in corresponding models.

Keywords. bill of lading option, Schwartz-Smith model, geometric Brownian model, Ornstein-Uhlenbeck process, Monte carlo method.