

[Source](#) | [Model](#) | [Option](#)
| [Model_Option](#) | [Help on ap methods](#) | [Archived Tests](#)

ap_bjersundstensland

This algorithm of approximation of the price of the american option was proposed Bjersund-Stensland [1].

/* Phi Function/*

Computation of ϕ function. (cf.[there](#)).

/* Price Formula/*

Computation of price (cf.[there](#)).

/*Price/*

/*Delta/*

To evaluate the delta we use a finite difference method.

/*Put Case/*

The value of the american call is given by the put-call transformation.

$$C(x, K, \theta, r, \delta, \sigma) = P(K, x, \theta, \delta, r, \sigma)$$

References

- [1] P.BJERKSUND G.STENSLAND. Closed form aproximation of american options prices. *to appear in Scandinavian Journal of Management*, 1992. Working Paper Norwegian School of Economics and Business Administration. [1](#)