ap_waley

This algorithm of approximation of the price of the american put option was proposed by Barone-Adesi and Whaley[1]).

/*Put Whaley Exponent/*
Computation of Put Whaley exponent q_2 (cf.there).

/*Call Whaley Exponent/*
Computation of Call Whaley exponent q_1 (cf.there).

/*Put Critical Price/*
We compute the critical prices with a iterative method for non linear equation (cf. there).

/*Call Critical Price/*
We comput the critical prices with a iterative method for non linear equation (cf. there).

/*Whaley Formula/*
Computation of option price (cf.there).

/*Price/*

/*Delta/*
To evaluate the delta we use a finite difference method.

References

[1] G.BARONE-ADESI R.E.WHALEY. Efficient analytic approximation of American option values. *Journal of Finance*, 42:301–320, 1987. 1