

Source		Model		Option	
	Model_Option		Help on fd methods		Archived Tests

fd_fem_out_bs

Input parameters:

- SpaceStepNumber N
- TimeStepNumber M
- Theta $\frac{1}{2} \leq \theta \leq 1$
- Raffinement $1 \leq ref \leq 4$

Output parameters:

- Price
- Delta

This finite element [there](#) scheme used a trapeizodal grid that is refined near the barriers, using a simple bell-shaped function to compute the point density in space.[\[1\]](#) In the american case we use the splitting methods. It seems that it converges very slowly. For this routine we send the reader to the [Routine fd_fem_updownout_bs.c](#)

References

- [1] J.BUSCA. A finite element method for the valuation of american options. Technical report, C.A.R. Internal Report, 1998. [1](#)