Electronic Journal: Southwest Journal of Pure and Applied Mathematics
Internet: http://rattler.cameron.edu/swjpam.html
ISSN 1083-0464
Issue 1, July 2003, pp. 66–72.
Submitted: June 19, 2002. Published: July 1 2003.

DOUBLE BARRIER OPTIONS WITH CURVED BOUNDARIES

Ghada Alobaidi[1] and Roland Mallier[2]

Abstract. We consider a double barrier option between two generic curved boundaries and use a Green's function analysis to reformulate the problem as a pair of coupled integral equations, and solve the integral equations for the special case of flat boundaries.

A.M.S. (MOS) Subject Classification Codes. 44A10, 45K05.

Key Words and Phrases. options, financial derivatives, Green's function, integral equations

[1]Department of Mathematics and Statistics, University of Regina,
Regina, SK, S4S 0A2, Canada
E-mail Address: alobaidi@math.uregina.ca
[2]Department of Applied Mathematics, The University of Western Ontario,
London ON N6A 5B7 Canada
E-mail Address: mallier@uwo.ca
©2003 Cameron University

Typeset by $\mathcal{AMS}$-TEX