THE UNIVERSITY



OF HONG KONG

Department of Mathematics

Operations Research Group Seminar (ORG)

May 16, 2002 (Thursday) 4:00 – 5:00pm 517 Meng Wah Complex, HKU

3:30pm - 4:00pm

Cookies & Tea Time

A Simple Method to Rank Warrants

Dr. Wai-Yan CHENG

Department of Economics and Finance City University of Hong Kong

Abstract

Almost 30 years since the appearance of the Black-Scholes option pricing formula, valuing derivative contracts is now a routine task for option trading professionals. The fair price is determined assuming the option is hedged dynamically by the underlying stock. A special kind of exchange-traded equity otpions, called covered warrants, is very popular in Hong Kong, Australia and some of the European countries. Most of the retail investors are buying warrants as a directional play. Consequently they will not hedge their option positions according to the Black-Scholes theory. Simple analytical tools under the names of premium, gearing and effective gearing have been used to analyze warrants. While these simple-minded tools can be misleading, the professional jargons such as implied volatility and greeks are not entirely appropriate for the retail investors. Based on a formula given by Rubinstein (1984), we propose a simple index called R ratio to evaluate the performance of covered warrants. It will be shown that R ratio essentially captures all the analytical tools mentioned above. As an example, R ratio will be applied to covered warrants in Hong Kong.

All are welcome