DIPARTIMENTO DI METODI E MODELLI
PER L'ECONOMIA IL TERRITORIO E LA FINANZA
MEMOTEF

SAPIENZA
UNIVERSITÀ DI ROMA

DELTA-HEDGING IN SYNTHETIC CDO STRUCTURES

F. Corapi, F. Russo, S. Rabino

ABSTRACT
The complexity of standard market practice and the new types of credit derivatives which have risen in the last decade have inspired this paper. A theoretical and a numerical construct of the Delta-Hedging of a Multi-Name Synthetic Collateralized Debt Obligation (SCDO) is presented, as the risk-management of such products plays a key role in determining their Profits and Losses. Delta is numerically calculated in order to define the amount of protection for each tranche due to a shift in the Credit Default Swap (CDS) spreads. A One-Factor-Copula Model is implemented in a finite and homogeneous portfolio framework.

Classification JEL

Keywords
Synthetic Collateralized Debt Obligation, Delta-Hedging, Credit Default Swaps, One-Factor-Copula, Correlation.

Working Paper n. 86/2011

Università degli Studi di Roma "La Sapienza"
Via del Castro Laurenziano 9, 00161 Roma (RM)
T (+39) 06 49766433 F (+39) 06 4957606
www.memotef.uniroma1.it