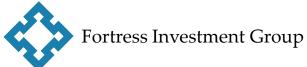
SCI's 3rd Annual OTC Derivatives Seminar

Counterparty Risk Management from the Buy Side Perspective

October 19, 2012

Hilmar Schaumann Chief Risk Officer Fortress Investment Group (212) 798-6119 hschaumann@fortress.com



All information contained herein is qualified in its entirety by the disclaimer on the next page of this document.

Disclaimer

- ▶ In General. This disclaimer applies to this document and the verbal or written comments of any person presenting it. This document, taken together with any such verbal or written comments, is referred to herein as the "Presentation." Fortress Investment Group LLC, taken together with its affiliates, is referred to herein as "Fortress."
- No offer to purchase or sell securities. The Presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any security and may not be relied upon in connection with the purchase or sale of any security. Any such offer would only be made by means of formal offering documents, the terms of which would govern in all respects. You are cautioned against using this information as the basis for making a decision to purchase any security or to otherwise engage in an investment advisory relationship with Fortress.
- No reliance, no update and use of information. You should not rely on the Presentation as the basis upon which to make any investment decision. To the extent that you rely on the Presentation in connection with any investment decision, you do so at your own risk. The Presentation does not purport to be complete on any topic addressed. The information in the Presentation is provided to you as of the dates indicated, and Fortress does not intend to update the information after its distribution, even in the event that the information becomes materially inaccurate.
- Knowledge and experience. You acknowledge that you are knowledgeable and experienced with respect to the financial, tax and business aspects of the Presentation and that you will conduct your own independent financial, business, regulatory, accounting, legal, and tax investigations with respect to the accuracy, completeness and suitability of the Presentation should you choose to use or rely on the Presentation, at your own risk, for any purpose.
- No tax, legal, accounting or investment advice. The Presentation is not intended to provide, and should not be relied upon for, tax, legal, accounting or investment advice. Any statements of federal tax consequences contained in the Presentation were not intended to be used and cannot be used to avoid penalties under the Internal Revenue Code or to promote, market or recommend to another party any tax related matters addressed herein.
- ▶ Distribution of this Presentation. These materials are not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use is contrary to local law or regulation.

Identifying, Monitoring and Assessing Counterparty Risks

Managing counterparty risk

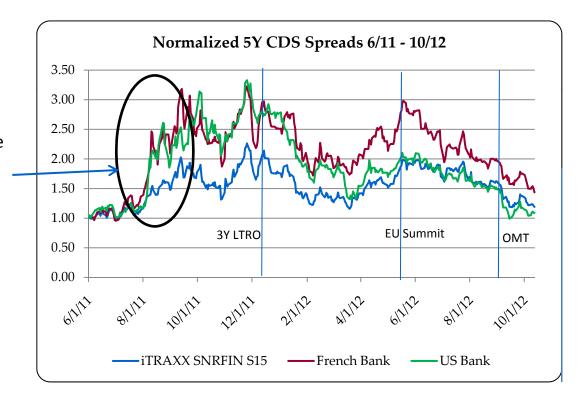
- Monitor counterparty exposure regularly
 - Bank deposits, OTC initial margins, futures margins, prime brokerage holdings, securities accounts
- Establish risk limits
- Avoid/reduce peak exposure
 - On a regular basis, discuss large exposure
- Create counterparty redundancies across regions, products, creditworthiness
- Monitor counterparties' credit spreads, news
- Define triggers for reducing counterparty exposure if counterparty deteriorates

Example: Impact of ECB Including Spain, Italy in SMP (August 2011)

iTRAXX SNR FIN S15, A Large French Bank, A Large US Bank - 5Y CDS Spreads (normalized)



- ▶ Identify **idiosyncratic** moves and analyze their causes
- ▶ Financial institutions particularly dependent on short term funding
 - Fundamental credit analysis does not apply in crisis situation
- ▶ ECB, Fed and governments determine outcome and create "New Normal"
- ▶ Political goals influence markets
 - SMP, OMT, ELA, "eurobonds", LTROs, unlimited bond purchases, ...
- ▶ Resolution mechanism may force equity holders and creditors to contribute



Reducing Counterparty Exposure

Changing positions to reduce counterparty exposure

- Move cash to a different bank (e. g. non-dealer)
- Assign trades away; unwind; buy protection on counterparty
 - Bank and sovereign CDSs not cleared
- Assignments require counterparties' consent; not in cleared world

Reducing Counterparty Exposure (cont.)

Structural / documentation / legal steps to manage collateral and reduce counterparty exposure

- Collateral (e. g. initial margin) held at Dealer
 Exposure to Dealer
- Collateral held in deposit account at Bank under <u>tri-party custody agreement</u>
- Investments in money market funds or securities accounts at Bank
 - Exposure to instruments and to Bank for operational risks
- Futures margin held at FCM Exposure to FCM (operational risks and default)
 FCM defaulting may expose one to "fellow customer risk"
 LSOC (for cleared swaps) may improve segregation of customer accounts (more expensive)
- Cash and securities held at Prime Broker Exposure to Prime Broker for cash and securities
 - Control in which jurisdiction collateral is held; keep assets in US
 - Limiting rehypothecation not issue with US PBs; relevant for UK
 - Limit cross collateralization



Managing Counterparty Exposure

Legal perspective

- Identify the counterparty
 - Domicile; branch or subsidiary; corporate structure
- Identify the relationships
 - Counterparty acting as PB, FCM, custodian or OTC counterparty?
 - Different entities and different roles within one franchise
 - Different rules apply depending on which hat counterparty wears
- Understand the rules
 - Regulatory regime (who regulates?; which are the regulations and rules?)
 - FCM regulated under Commodities Exchange Act and US bankruptcy laws; if FCM is clearing member, important to understand rules of clearinghouse
 - Single counterparty may be subject to different regulators and rules depending on its activity
 - US broker dealer for its security business subject to SEC; for its futures business, subject to CFTC
- Maximize protection
 - If a counterparty trades both cleared and uncleared swaps, tri-party custody arrangements enhance protection for uncleared swaps (still bilateral) but not for cleared
- Negotiate contractual provisions to maximize protection
 - Differs across legal regimes
- Acknowledge regulatory uncertainty

Stabilizing the System

Cost-Benefit Analysis

- Clearing plans well received after financial crisis
- True costs uncertain
- Margining tail risk may make certain instruments expensive
 - True tail risk underpriced in benign credit environment leading up to the crisis
 - Low initial margin, cheap PB funding
- Own margin supporting FCM's futures margin pool
 - Intention to stabilize the system, not the individual account
 - LSOC segregates customer margins for cleared swaps
 - LSOC causes increase in margin requirements to make up for lost pool effect