

Insurance Investment Practices during an
Economic Downturn
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Discussion Topics

- Risk Appetite
- Risk Management
 - Tactical vs. Strategic
- Financial Disaster Preparedness Checklist
- Rebalancing

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Investment Risk Appetite

- Two pieces:
 - Ability to assume risk
 - Willingness to assume risk
- Many definitions and metrics for risk
 - Meaningful and material to your business
 - Be specific on how and where it impacts you
 - Not always quantitative

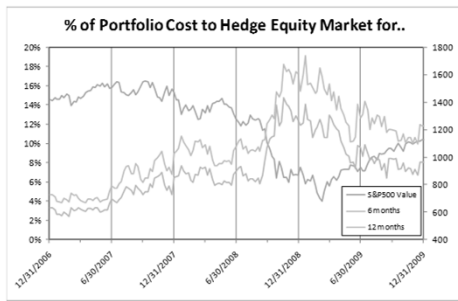
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Investment Risk Management

- Tactical
 - Requires timing and conviction without restrictions

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S&P 500 Put Options

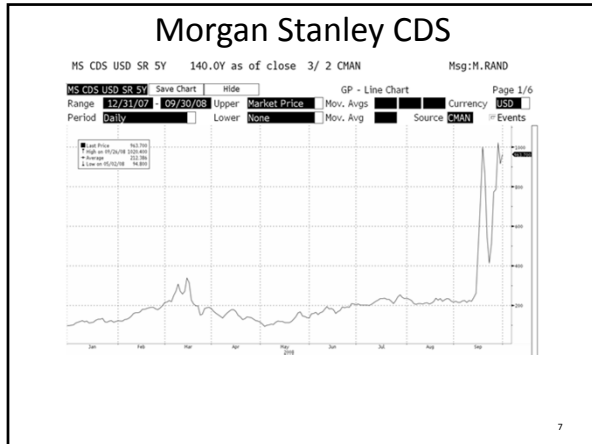


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Lehman Credit Default Swap (CDS)



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- ### Investment Risk Management
- Tactical
 - Requires timing and conviction without restrictions

 - Strategic
 - Requires time and construction
 - Too late if hurricane is on the horizon
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- ### Disaster Preparedness Checklist
- Profitable operations
 - Diversification
 - Due diligence
 - Risk control
 - Investment guidelines and compliance
 - Liquidity
 - Lines of communication
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Diversification

- Across asset classes
- Across capital structure
- Across borders
- Across managers
- No big bets
 - Style or size over weights
 - Sector strategies
- Balance diversification with excess return

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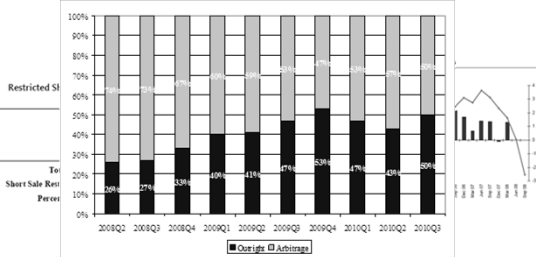
Due Diligence

- Understand the asset class
 - Expectations in different market conditions
- Who are the other investors in the asset class?
 - Hedge funds, private investors, etc.
- Understand your managers
 - Strengths and weaknesses
 - Expectations in different market conditions
 - Organizational Stability
- What % of a fund, partnership do you represent?
- What does “enhanced” mean?
 - Beta becomes alpha
 - Over engineering
- No free money. No such thing as a “no-brainer”

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Due Diligence (example)

- Hedge fund impact on convertible bond market



Source: Barclays Capital, Tremont.

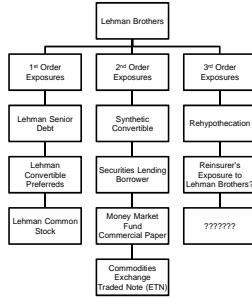
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Risk Control

- Re-confirm risk tolerance
 - Multiple definitions of risk
- Portfolio manager risk controls
- Don't overlook risk for return
- Enterprise exposures:
 - Across accounts (including pension)
 - Across capital structure
- Know your counterparties (from your due diligence)
 - 1st order: direct investments
 - 2nd order: indirect exposures
 - 3rd order: your business partners

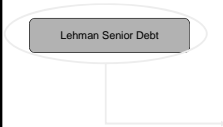
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Risk Control (example)



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Risk Control (example)



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Investment Guidelines and Compliance

- Issuer limits (by quality)
- Sector limits
- Aggregate portfolio exposures
- Custodian capabilities
- Manager pre/post trade capabilities
- Create a loss budget for managers
- Create and adhere to a thoughtful impairment policy
- Balance constraints with manager flexibility

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Investment Guidelines and Compliance

- What you can do with a smart finance employee and Microsoft Excel....

Symbol	Market Value	% of Portfolio	Comments
AAA	1,234,567	1.2%	
AA	2,345,678	2.3%	
AA	3,456,789	3.4%	
AA	4,567,890	4.5%	
AA	5,678,901	5.6%	
AA	6,789,012	6.7%	
AA	7,890,123	7.8%	
AA	8,901,234	8.9%	
AA	9,012,345	9.0%	
AA	10,123,456	10.1%	
AA	11,234,567	11.2%	
AA	12,345,678	12.3%	
AA	13,456,789	13.4%	
AA	14,567,890	14.5%	
AA	15,678,901	15.6%	
AA	16,789,012	16.7%	
AA	17,890,123	17.8%	
AA	18,901,234	18.9%	
AA	19,012,345	19.0%	
AA	20,123,456	20.1%	
AA	21,234,567	21.2%	
AA	22,345,678	22.3%	
AA	23,456,789	23.4%	
AA	24,567,890	24.5%	
AA	25,678,901	25.6%	
AA	26,789,012	26.7%	
AA	27,890,123	27.8%	
AA	28,901,234	28.9%	
AA	29,012,345	29.0%	
AA	30,123,456	30.1%	
AA	31,234,567	31.2%	
AA	32,345,678	32.3%	
AA	33,456,789	33.4%	
AA	34,567,890	34.5%	
AA	35,678,901	35.6%	
AA	36,789,012	36.7%	
AA	37,890,123	37.8%	
AA	38,901,234	38.9%	
AA	39,012,345	39.0%	
AA	40,123,456	40.1%	
AA	41,234,567	41.2%	
AA	42,345,678	42.3%	
AA	43,456,789	43.4%	
AA	44,567,890	44.5%	
AA	45,678,901	45.6%	
AA	46,789,012	46.7%	
AA	47,890,123	47.8%	
AA	48,901,234	48.9%	
AA	49,012,345	49.0%	
AA	50,123,456	50.1%	
AA	51,234,567	51.2%	
AA	52,345,678	52.3%	
AA	53,456,789	53.4%	
AA	54,567,890	54.5%	
AA	55,678,901	55.6%	
AA	56,789,012	56.7%	
AA	57,890,123	57.8%	
AA	58,901,234	58.9%	
AA	59,012,345	59.0%	
AA	60,123,456	60.1%	
AA	61,234,567	61.2%	
AA	62,345,678	62.3%	
AA	63,456,789	63.4%	
AA	64,567,890	64.5%	
AA	65,678,901	65.6%	
AA	66,789,012	66.7%	
AA	67,890,123	67.8%	
AA	68,901,234	68.9%	
AA	69,012,345	69.0%	
AA	70,123,456	70.1%	
AA	71,234,567	71.2%	
AA	72,345,678	72.3%	
AA	73,456,789	73.4%	
AA	74,567,890	74.5%	
AA	75,678,901	75.6%	
AA	76,789,012	76.7%	
AA	77,890,123	77.8%	
AA	78,901,234	78.9%	
AA	79,012,345	79.0%	
AA	80,123,456	80.1%	
AA	81,234,567	81.2%	
AA	82,345,678	82.3%	
AA	83,456,789	83.4%	
AA	84,567,890	84.5%	
AA	85,678,901	85.6%	
AA	86,789,012	86.7%	
AA	87,890,123	87.8%	
AA	88,901,234	88.9%	
AA	89,012,345	89.0%	
AA	90,123,456	90.1%	
AA	91,234,567	91.2%	
AA	92,345,678	92.3%	
AA	93,456,789	93.4%	
AA	94,567,890	94.5%	
AA	95,678,901	95.6%	
AA	96,789,012	96.7%	
AA	97,890,123	97.8%	
AA	98,901,234	98.9%	
AA	99,012,345	99.0%	
AA	100,123,456	100.1%	

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Liquidity

- Profitable operations
- Federal Home Loan Bank (FHLB) membership
- Lines of credit
- Separate account versus fund
- You should know:
 - Notification and timing requirements at managers for redemptions
 - Your share class in a partnership
 - The % of a fund or partnership you represent
 - How your securities lending program really works
- “Markets can stay irrational longer than you can stay solvent...”

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Liquidity (example)

- Hedge fund-of-fund share classes
 - Committed class
 - 3 year rolling lock
 - Lower fees
 - Standard class
 - Quarterly liquidity, initial 1 time, 1 year lock
 - Higher fees
 - Slightly lower returns (due to increased redemptions)
 - 370 days notice is needed to convert Committed class shares to Standard class shares

Liquidity (example)

- Hurricane Ike
 - September 14th 2008, hits Columbus Ohio
 - Initial damage: \$553M
 - State Farm, Nationwide and Grange report that Hurricane Ike is the most costly Ohio storm in each company's history
- What if companies had to sell securities at the end of September to pay claims?

Lines of Communication

- Those who touch your money:
 - Portfolio Managers
 - Custodians
- Those who direct investment strategy:
 - Senior management
 - Committee and Board members
- NAIC Model Law
- Know the availability and frequency of information and pricing
- Confirm expectations and risk tolerances frequently

Lines of Communication (example)

- **NAIC Model Law: Section 5. Prudence Evaluation Criteria**

The following factors shall be evaluated by the insurer and considered along with its business in determining whether an investment portfolio or investment policy is prudent; the commissioner shall consider the following factors prior to making a determination that an insurer's investment portfolio or investment policy is not prudent:

- A. General economic conditions;
- B. The possible effect of inflation or deflation;
- C. The expected tax consequences of investment decisions or strategies;
- D. The fairness and reasonableness of the terms of an investment considering its probable risk and reward characteristics and relationship to the investment portfolio as a whole;
- E. The extent of the diversification of the insurer's investments among:
 - (1) Individual investments;
 - (2) Classes of investments;
 - (3) Industry concentrations;
 - (4) Dates of maturity; and
 - (5) Geographic areas;
- F. The quality and liquidity of investments in affiliates;

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Lines of Communication (example)

- **NAIC Model Law: Section 5. Prudence Evaluation Criteria**

G. The investment exposure to the following risks, quantified in a manner consistent with the insurer's acceptable risk level identified in Section 6H:

- (1) Liquidity;
- (2) Credit and default;
- (3) Systemic (market);
- (4) Interest rate;
- (5) Call, prepayment and extension;
- (6) Currency; and
- (7) Foreign sovereign;
- H. The amount of the insurer's assets, capital and surplus, premium writings, insurance in force, and other appropriate characteristics;
- I. The amount and adequacy of the insurer's reported liabilities;
- J. The relationship of the expected cash flows of the insurer's assets and liabilities, and the risk of adverse changes in the insurer's assets and liabilities;
- K. The adequacy of the insurer's capital and surplus to secure the risks and liabilities of the insurer; and
- L. Any other factors relevant to whether an investment is prudent.

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Rebalancing

- **Common behavior:**
 - Wait till markets calm down
 - Start when the market has hit bottom
- **Stick to your discipline**
 - Uncomfortable
 - Pays off in the end

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