

Hedging – Help!

Convince My Board We Need To Hedge and Won't Blow Up the Company

New York Cash Exchange – 2009
A Treasury Management Conference



David W. Stowe, CFA

Disclaimer

Please keep in mind this material is protected by copyright. ALL RIGHTS RESERVED. REPRODUCTION IN WHOLE OR IN PART WITHOUT PERMISSION IS PROHIBITED.

Intellectual Property

Materials and intellectual property found in this document are protected by copyright and other intellectual property laws and treaties in the United States and worldwide. Trademarks, service marks and logos used on websites of Strategic Treasurer LLC are registered and unregistered trademarks, subject to the laws of the United States and other countries worldwide. Trademarks, service marks and logos used on these websites that have been provided by others are the property of their respective owners. You may not copy, modify, store, transmit, reproduce, or distribute any part of the information or content of or trademarks, service marks or logos used on these websites without the specific written consent of Strategic Treasurer LLC or their respective owners.

No Legal, Accounting, Finance or Investment Advice

Content of this document should not be construed to be legal, accounting, finance or investment advice. Users are responsible for obtaining their own competent legal, accounting, finance and investment advice from qualified providers at their own expense.

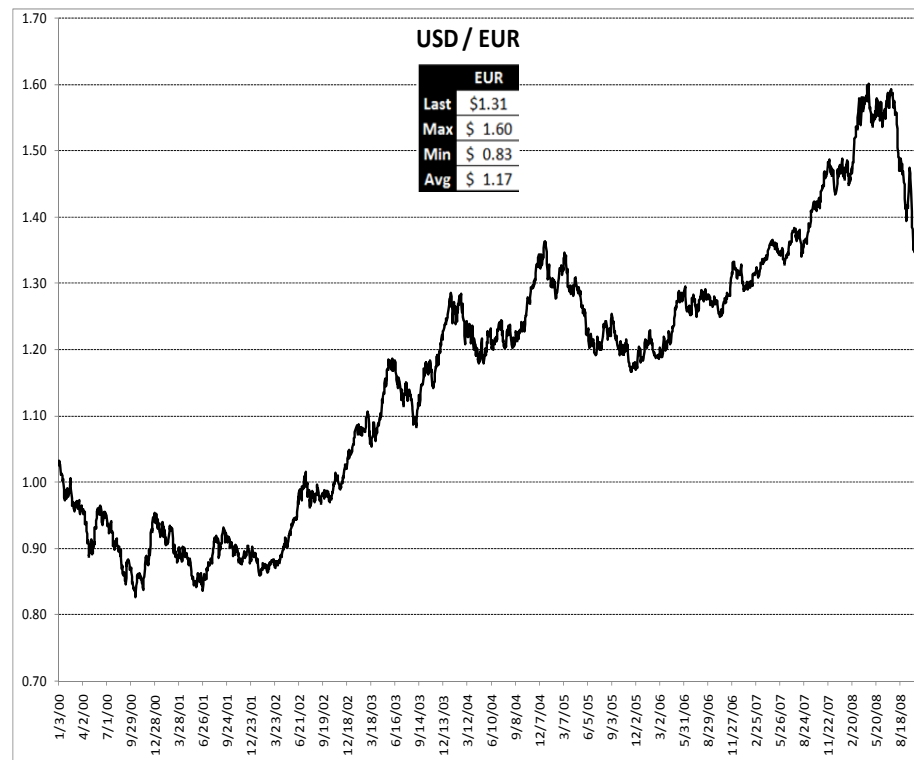
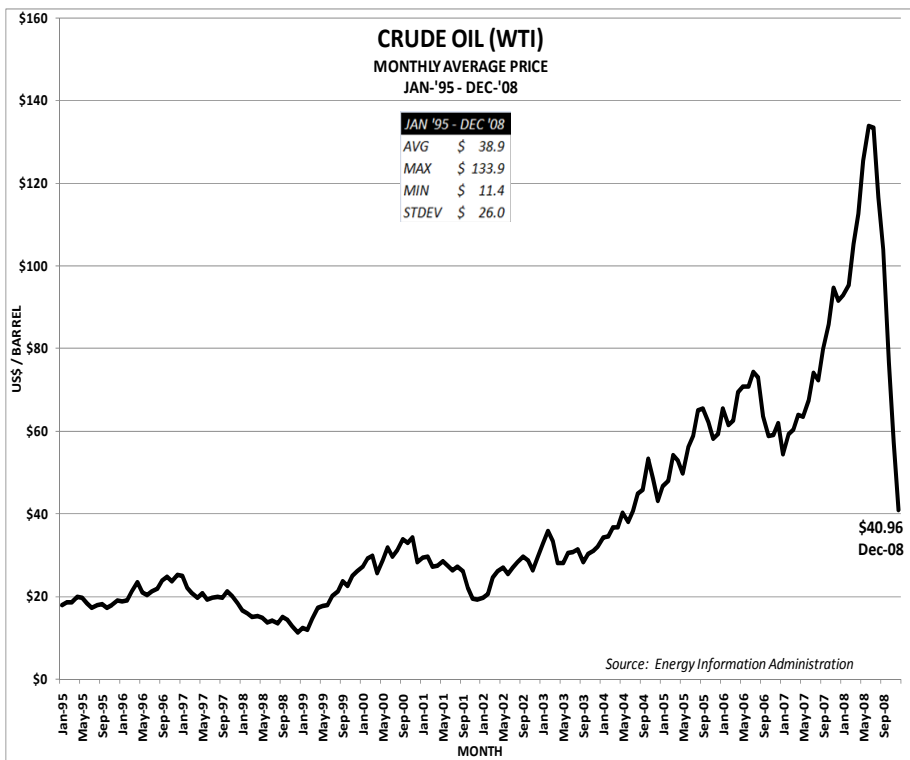
Diagrams

Some diagrams in this presentation are from the soon-to-be-published book, *The Strategic Treasurer: A Partnership for Corporate Growth*, Craig Jeffery, Copyright © 2009 John Wiley & Sons. “Reprinted with permission of John Wiley & Sons, Inc.”



Risk

How confident are you in forecasting prices / rates?



Premise

This presentation is an overview of the concepts one needs to consider in establishing an effective risk management program, including –

- Introduction to risk
- Choices regarding it
- Value in managing it
- An understanding of why organizations hedge
- What is entailed in a risk management process
- Helping you:
 - Ask the right questions
 - Focus on the right issues

Introduction

Prudent companies

- Look at risk systematically
- Understand the risk to their value drivers
- Understand the value in risk management
- Approach risk management consistently throughout company – an enterprise approach
- Have established controls to ensure risk management objectives are carried out

Questions For The Audience

- Why are Board members / Senior Management *fearful* of or reluctant to hedge?
- Why do so many companies get it wrong?
- Why do derivatives get a bad *rap*?
- Is an *exposure* necessarily a *risk*?
- Does hedging:
 - Add value?
 - Save money?
- Do you want the value of your hedge portfolio to rise?

Questions From Your Peers

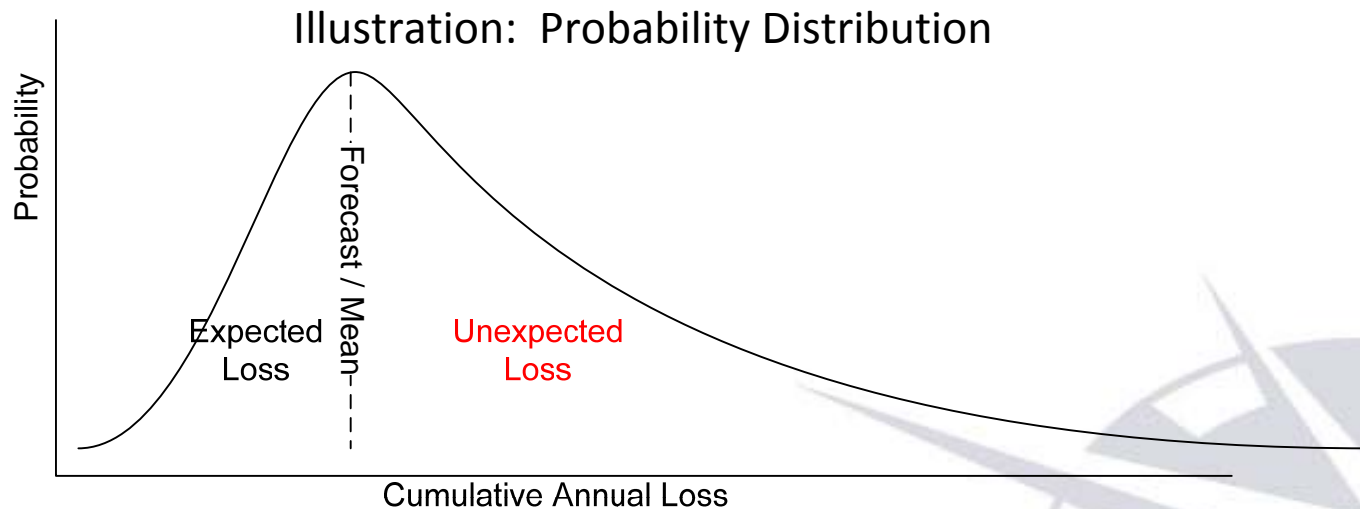
1. (From AFP-TCM): We are considering the use of options for hedging the volatility of certain commodity products. Our volume is very low over the course of any 12 month period... any recommendations for a broker that would take on a small program.
2. (From AFP-TCM): My company has entered into its first overseas contract and we are wondering to what extent companies will hedge known foreign cash flows? We are considering hedging 100% of these revenues, but wanted to see what other companies do in that regard. I have seen Fx policies that talk about hedging 100% of more short term revenues, but only hedging 50% of revenues further out. Does anyone out there hedge 100% of contracted revenues over a year to up to three year in the future? If not, why not?

Contents

- Risk
- Dealing With Risk
 - Risk Appetite
 - Risk Management Choices
- Value In Risk Management
- Financial Risk Management Process
 - Economics
 - Controls
 - Accounting
- Implementation Issues
- Other Issues to Consider

Risk

- Connotes a negative impact
- Variance in possible outcomes / Exposure to uncertainty
- May be difficult to quantify your risks

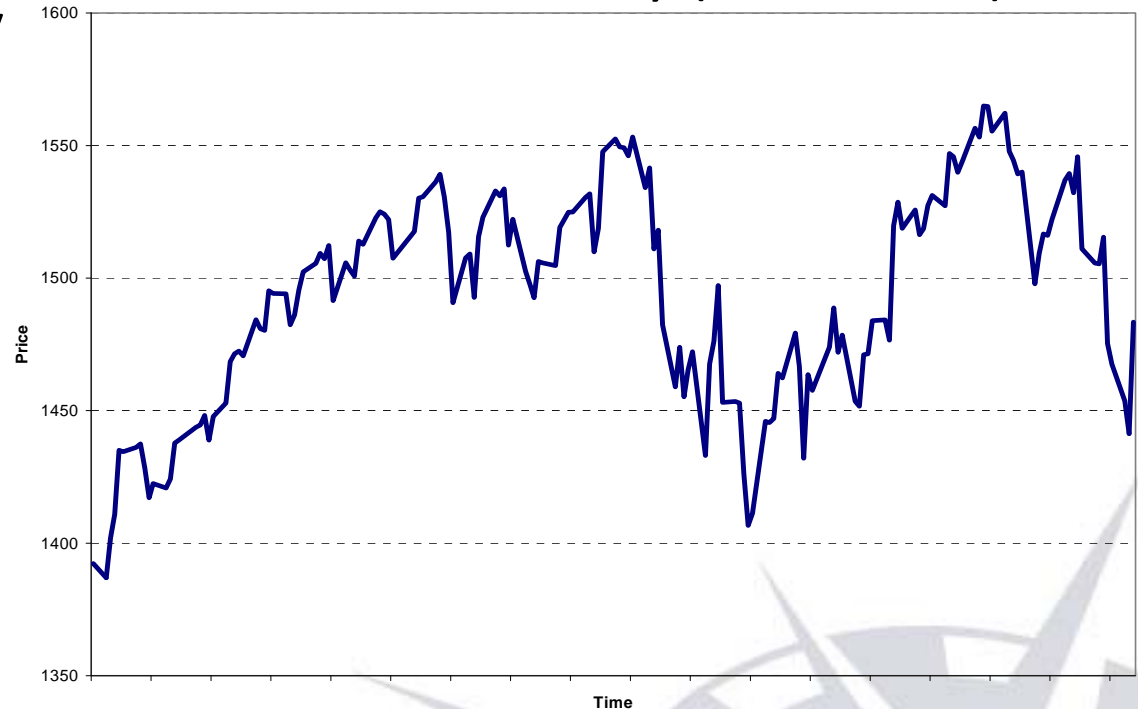


Risk Is A Part of Business - Without risks, the potential for investment returns would be minimal.

Visualizing Risk / Risk Metrics

- Visualize volatility / uncertainty
- Rank Outcomes
- See 'worst case'
- Limitations:
 - Times Change
 - Future Uncertain

Historical Volatility (Illustration)



Relative Metrics:

- Variance / Standard Deviation
- R-squared / Correlation
- Volatility Reduction: $\{(\sigma_{\text{unhedged}} - \sigma_{\text{portfolio}}) / \sigma_{\text{unhedged}}\}$

Visualizing Risk / Risk Metrics

- Alternative Paths
- Path Dependency
- Project Future State
- Limitations:
 - Volatility
 - Probabilities
 - Valuation Model
 - *Bad Information*

Relative Metrics –

- Cash Flow At Risk (CFAR)
- Earnings At Risk (EAR)
- Value At Risk (VAR)

Simulation (Illustration)

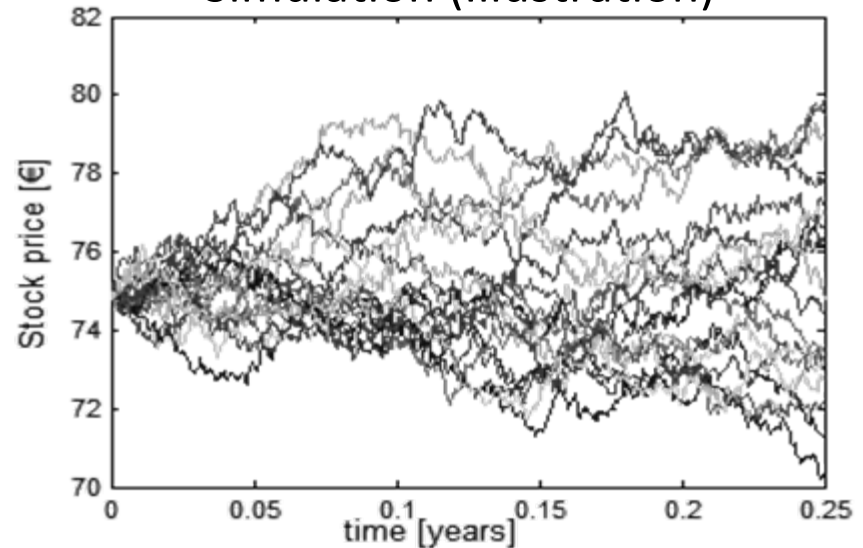
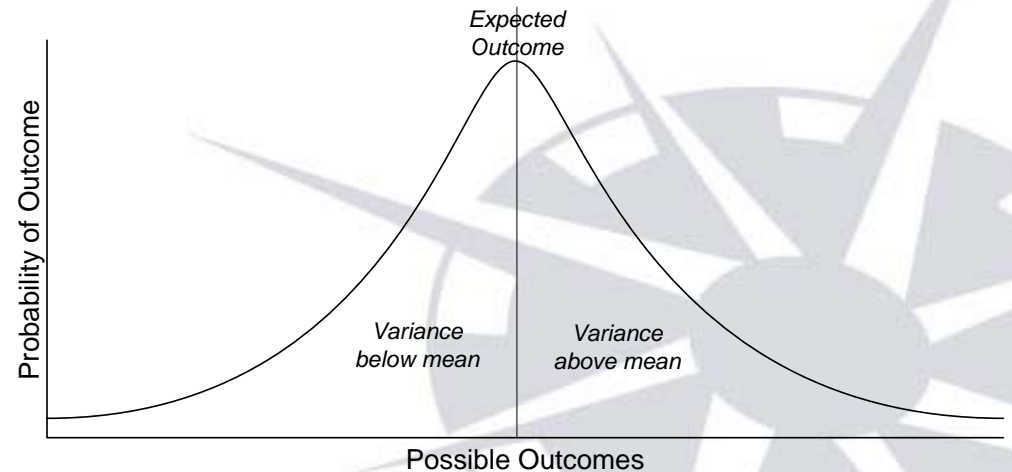


Illustration- Normal Probability Distribution

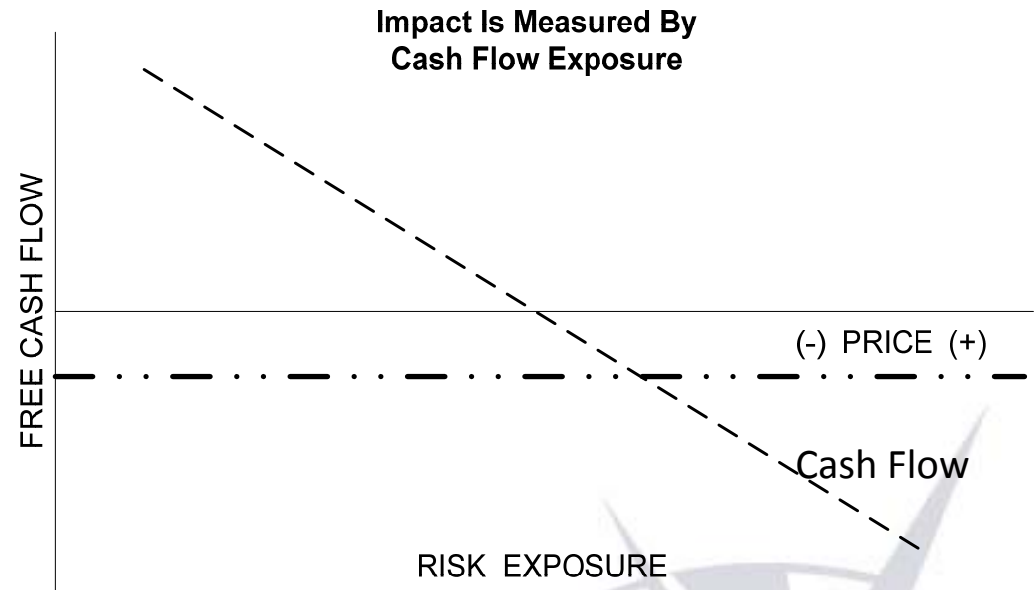


Risk Impact

'Investors not paid in probabilities' Taleb

- Keys:
 - Volatility – cash flow uncertainty
 - Impact
- Determine *Thresholds*
- Limitations:
 - *Simplistic*
 - Linear
 - Interaction of risks
 - *Don't know all scenarios*

Stress Test / Scenario Analysis



'Remain Skeptical: Models Are Ways To Think About Risks' (Taleb)

Risk Impact

- *Heat Map*
- Good Start
- Limitations:
 - Simplistic
 - Wrong Focus
 - Future Uncertain
- Exposure \neq Risk

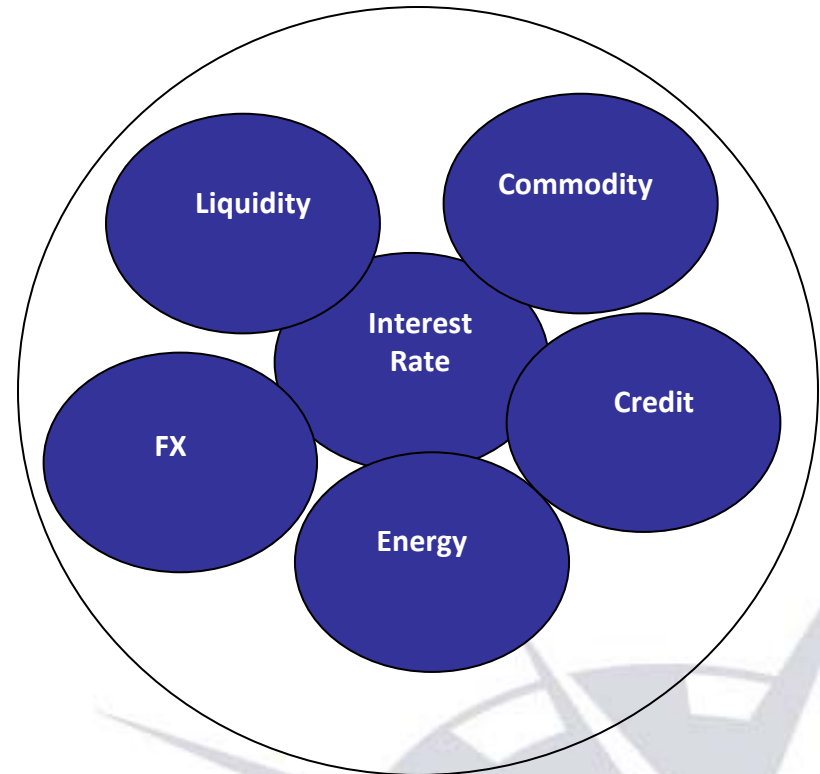
Risk Ranking: *Variability & Impact*

		IMPACT		
VARIABILITY	I	High Variability / Low Impact	II High Variability / High Impact	VARIABILITY
	III	Low Variability / Low Impact	IV Low Variability / High Impact	
		IMPACT		

Whether risk is acceptable or not, is dependent upon management's risk appetite.

Treasurer's Role & Concern

- Financial Risks
 - Liquidity / Reserves
 - Credit Exposure / Counterparty risk
 - FX Rates
 - Interest Rates
 - Commodity Prices
 - Energy Prices

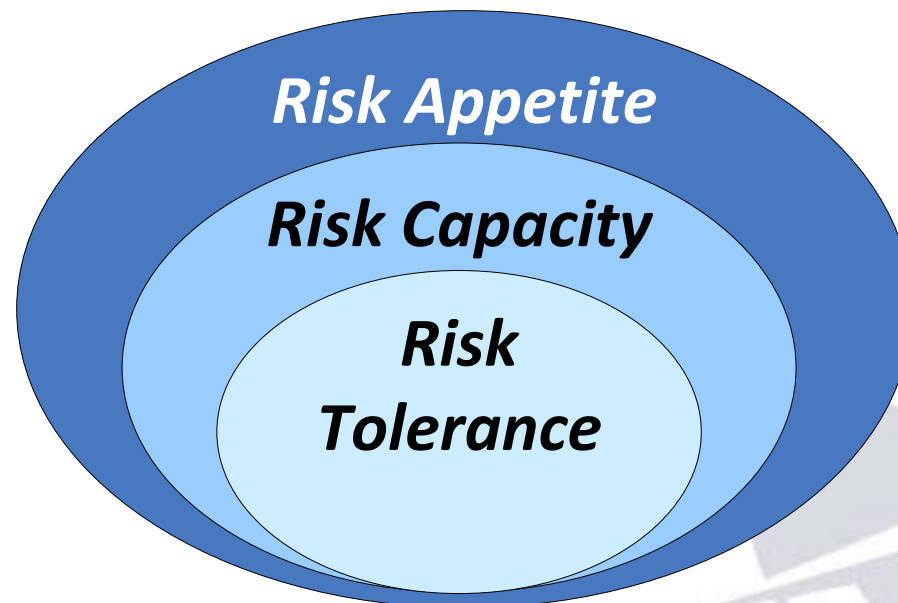


- An Enterprise Approach

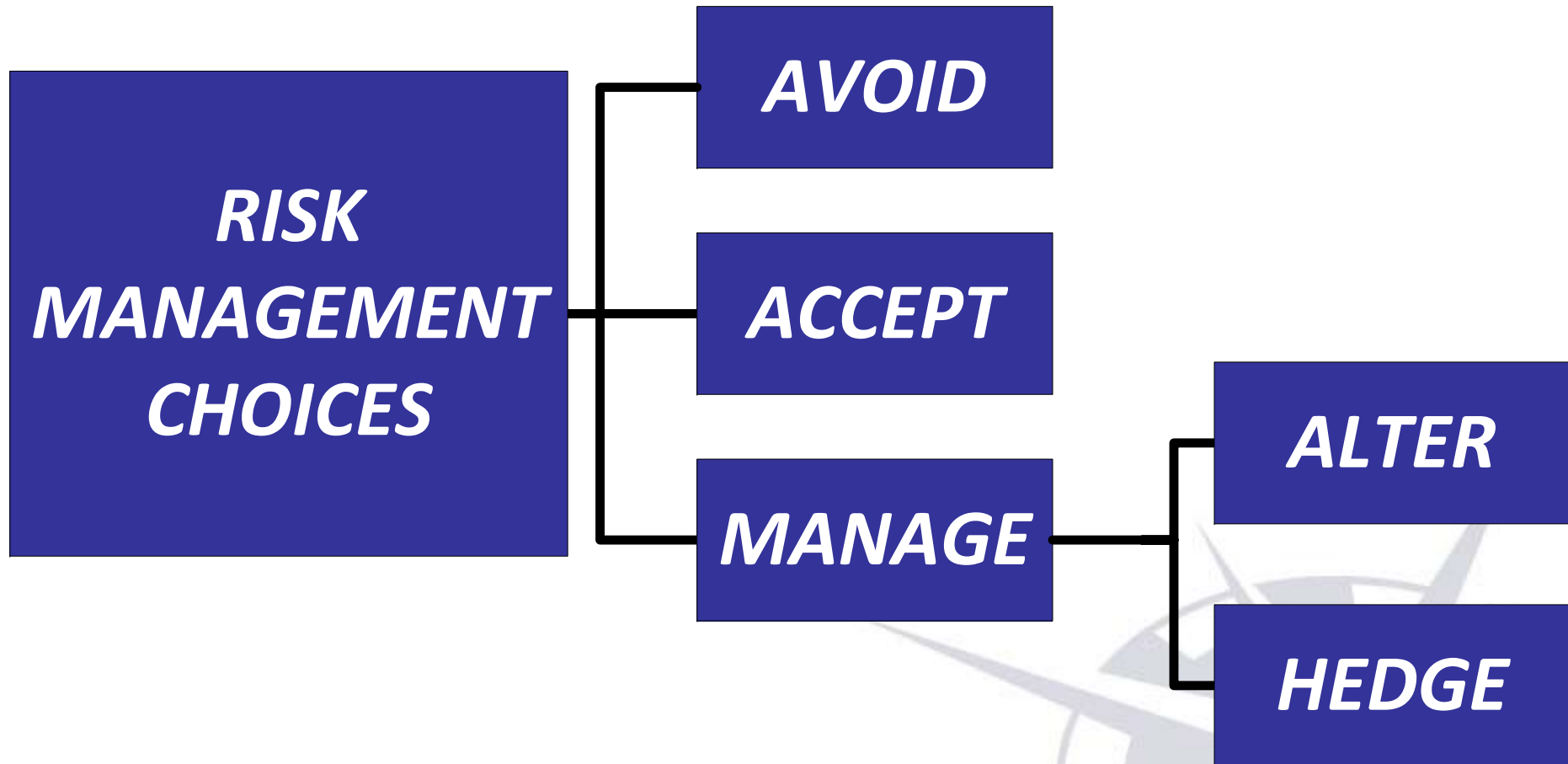
Dealing With Risk

- How much risk do we have?
- How much can we endure?
- How much do we want to keep?

Dependent Upon



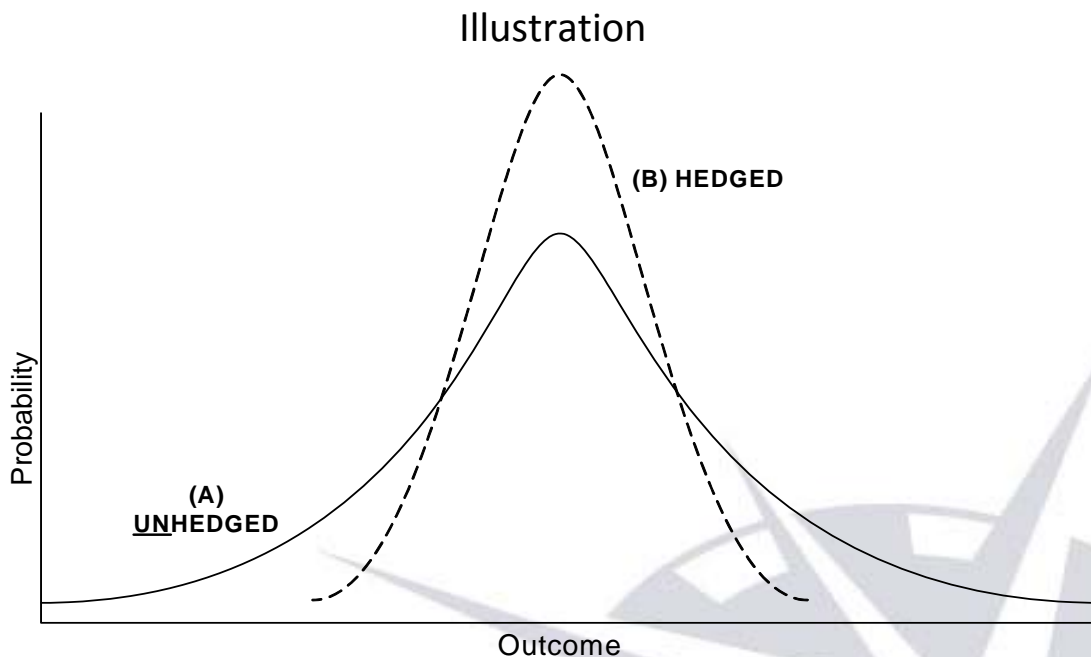
Dealing With Risk



Manage / Hedging Risk

Risk Management: *'alter the risk [a company] faces to make it equal to the risk it desires.'* (G.Krissek)

- Inherent Risk
- Residual Risk



Risk management should reduce the variance in possible outcomes, mitigating surprises.

Reasons For Hedging Risk

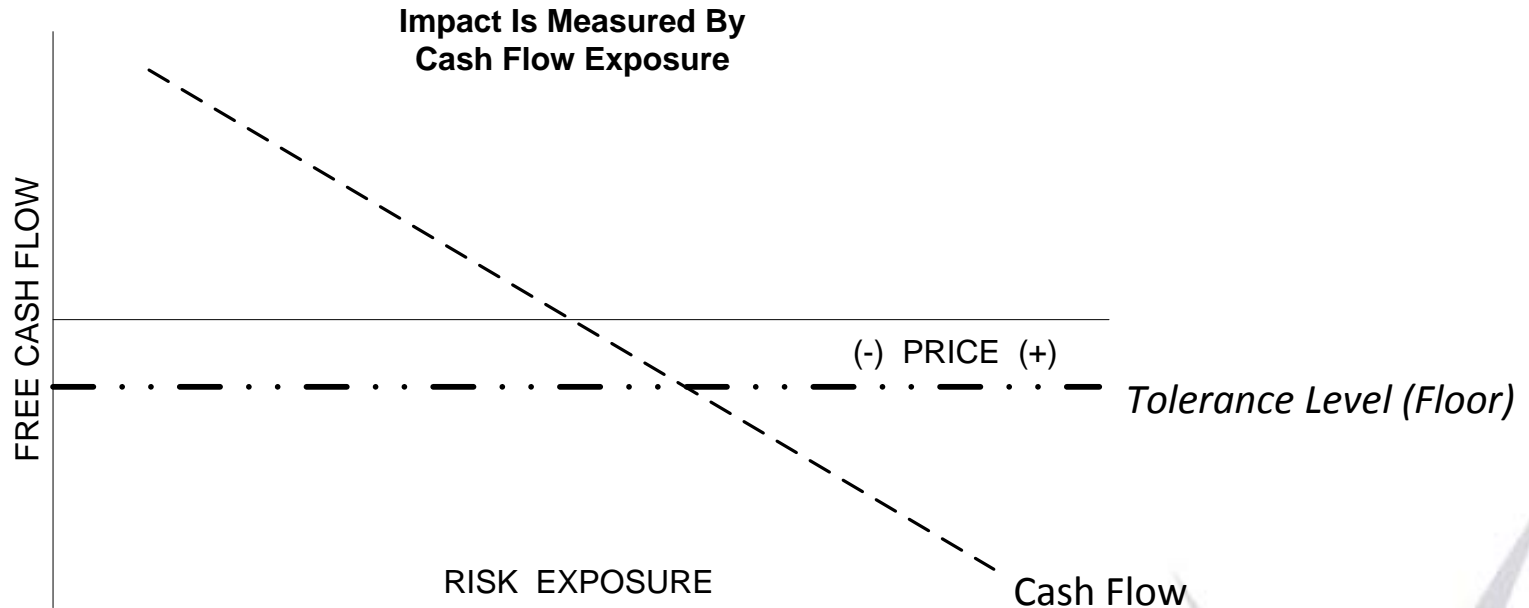
Reduce Volatility to:

- Avoid Financial Distress
 - Cash flow volatility
 - Liquidity reserves
 - Investment opportunities / Under-Investment
 - *Gambler's Ruin*
- Provide Predictability
 - Allow management to plan
 - Evaluate management performance

'If We're Not Managing Our Risks, We're Speculating'

What To Hedge?

- Cash flow



- Earnings
- Equity
- Balance Sheet

The ‘*Black Swan*’ Event

**Taleb - ‘Fooled By Randomness’*

- We live in a random world
- Probability / Frequency / Expected Value
- *A Normal world vs. a Skewed world*
- *A Black Swan event*
- What to do:
 - Accept that you don’t know
 - Have an action plan, i.e. a *stop-loss*

“Almost no one expected what was coming. It’s not fair to blame us for not predicting the unthinkable.” – *Daniel H. Mudd, former chief executive, Fannie Mae*

(NY Times. Pressured to Take More Risk, Fannie Reached Tipping Point . 10-4-08)

Risk Management & Value

- Firm Value = PV (Future Cash Flows)
- Why is this important?
- Finance theories suggest that, generally, risk management does not add value:
 - *M&M – value produced by cash flows of real assets*
 - *CAPM – not paid for diversifiable risks*
 - *Equity = option on firm's assets*

Value In Risk Management

Theory vs. Reality -

- ‘Theory is a basis for thought and decision making’
- Based on *long-run*
- Theory excludes key factors of reality
 - i.e. Taxes, Cost of Bankruptcy, Asymmetric Info., Access to Capital
- Other *issues* to consider
 - Stakeholders
 - Management *more informed / better equipped*

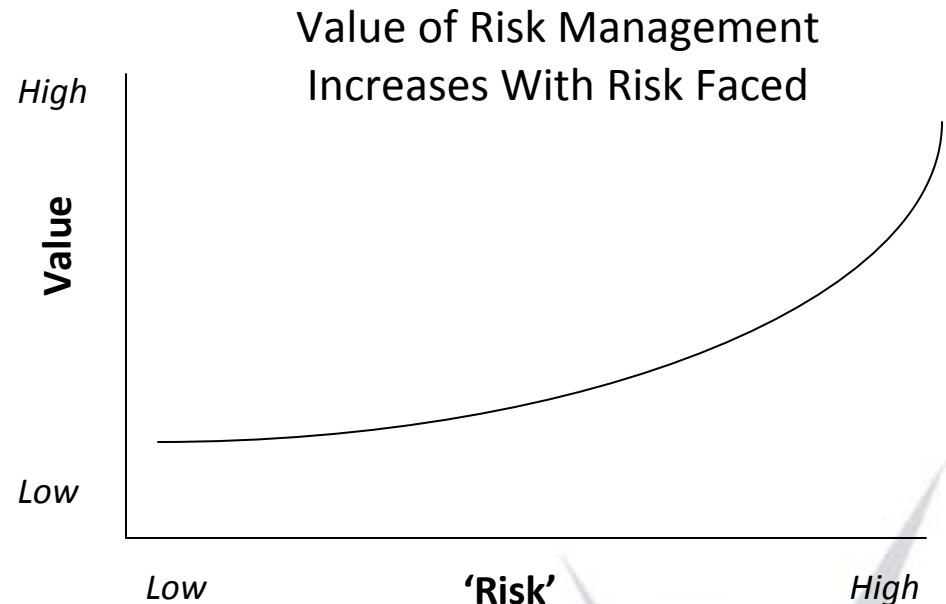
Value In Risk Management

- Primary Value Drivers:

- Financial Distress
- Predictability

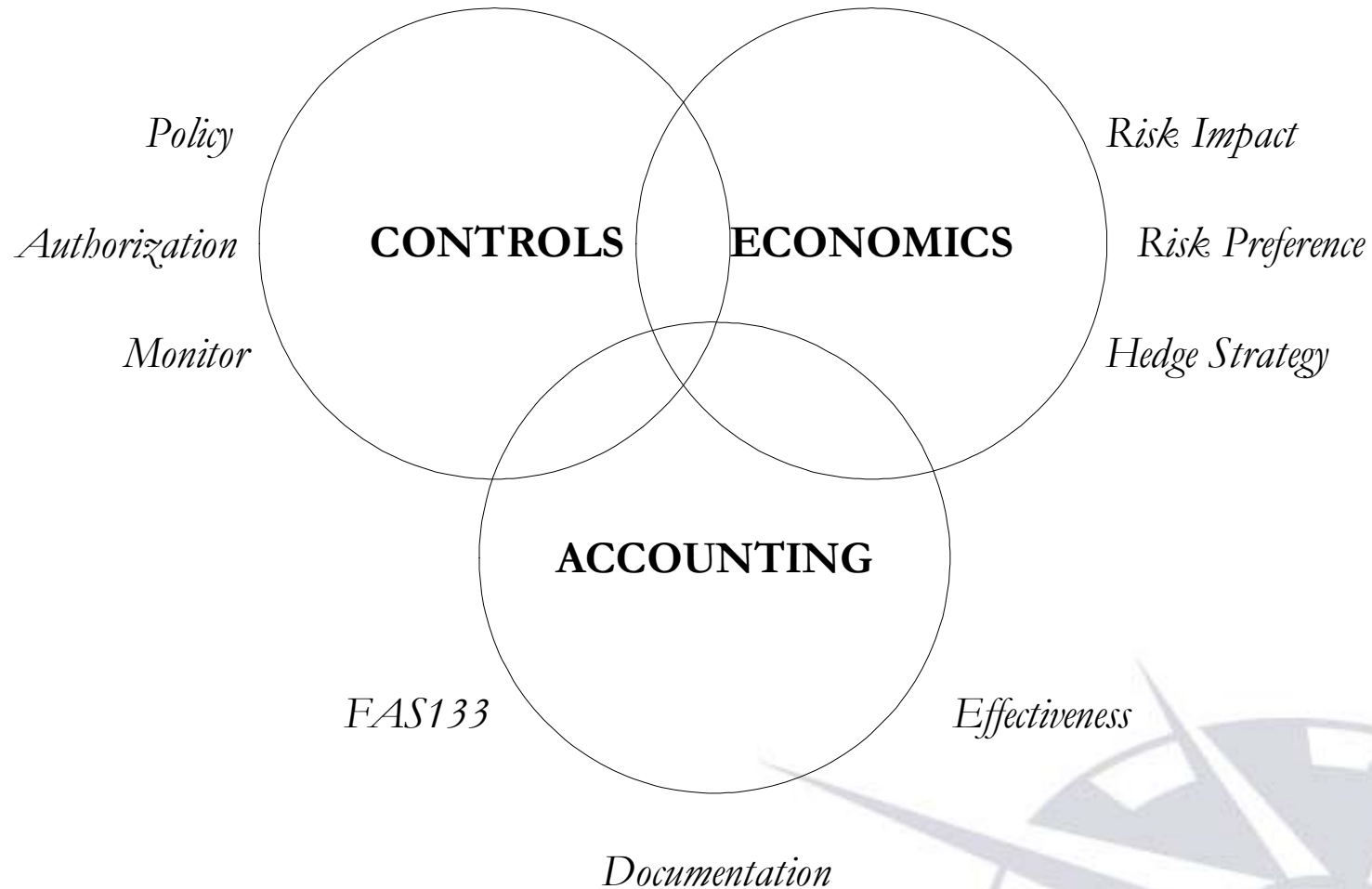
- Impacting:

- Capital Structure
- Access to Capital
- Investment Decisions



‘Risk management impacts value if it impacts management’s decisions / actions.’

Financial Risk Management Process



An effective risk management framework requires the strength of each leg.

Framework - Economics

- Risk Identification
- Risk Impact
- Risk Tolerance
- Risk Management Objectives
- Strategy Execution
- Performance Evaluation
- Adapt / Revise
- Communicate



Framework - Controls

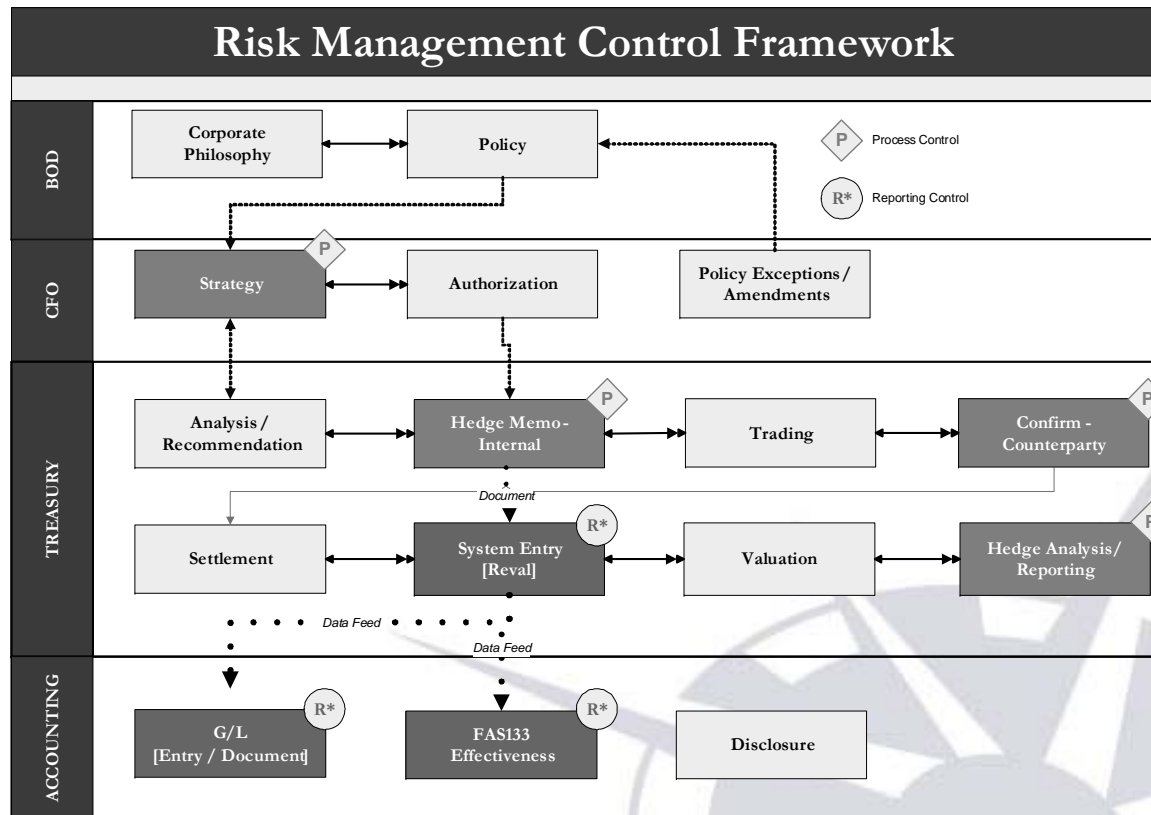
Controls ensure that the objectives of the risk management activities are being met - preventing 'blow-ups'.

•Types

- Preventative
- Detective

•Include:

- Oversight
- Authority
- Policy
- Reporting
- Monitoring / Benchmarking



Risk Management Policy

- Overview of Business
- Exposures / Impact
- Risk Management Philosophy / Objectives
- Roles and Responsibilities
 - Risk Committee
- Counterparties / ISDA's / Confirms
- Risk Management Tools
- Communication / Reporting
- Policy Approval / Enforcement
 - Policy Exceptions and Amendments
- Accounting Guidelines / Hedge *Term Sheets*

Control Failures

Derivative *Blow-Ups* and other mishaps (1990's):

- Barings Bank
- Kidder Peabody
- Proctor & Gamble
- Orange County, CA

Could they happen today?

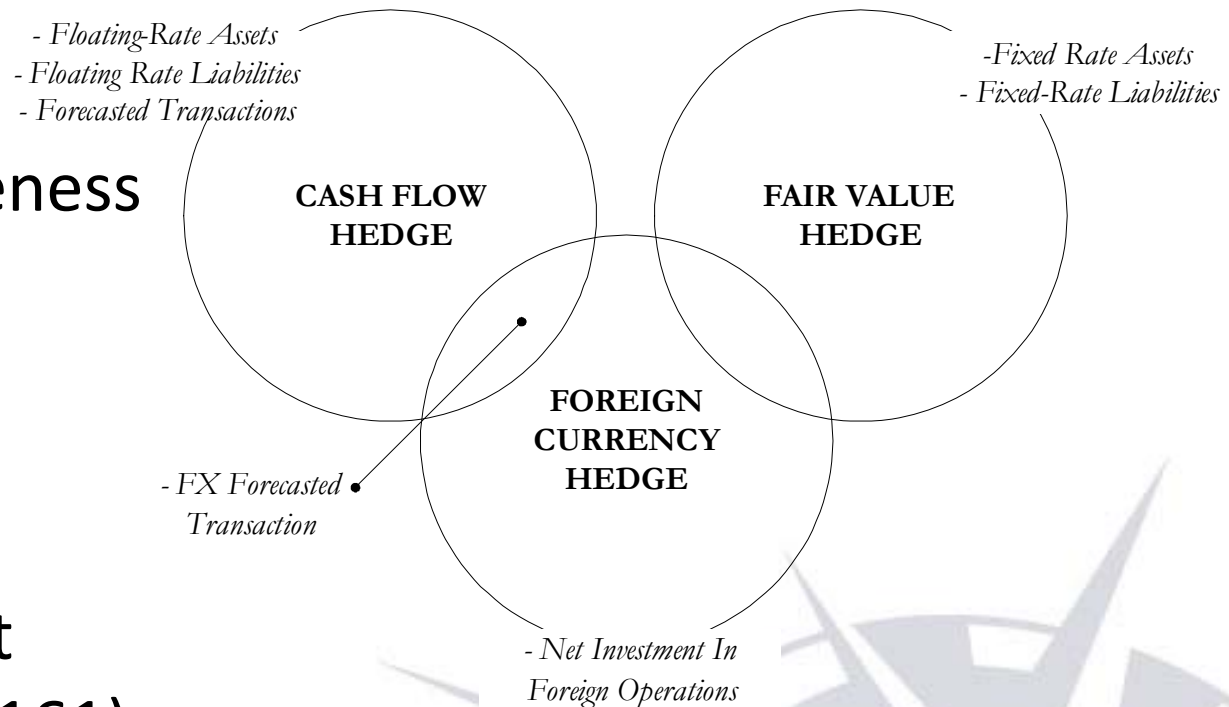
- Société Générale

Most examples of derivative *blow-ups* were a result of poor internal controls.

Framework - Accounting

FAS133 / IAS39:

- Designate
- Document
- Assess effectiveness
- Value (FAS157)
- Measure ineffectiveness
- Equity Impact
- Earnings Impact
- Disclosure (FAS161)



Your role does not end with the hedge execution.

Implementation Issues

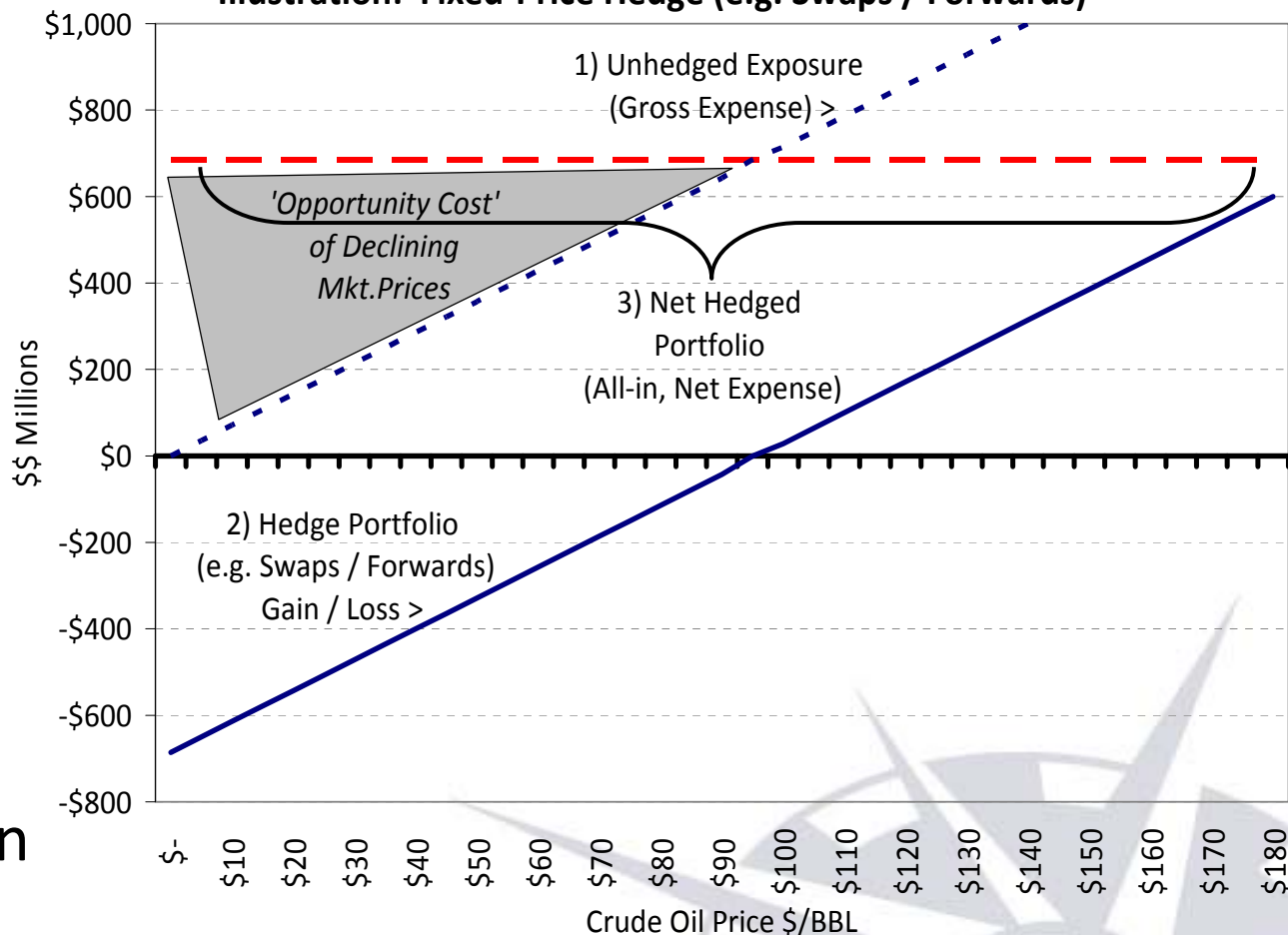
Overview of issues to consider:

- Personnel
- Framework
- Tools
- Counterparties
- Credit exposure
- Trading process
- Communication
- Accounting / Auditors
- Tax
- Systems

Don't *Cheer* For Your Hedges

- Hedge, per se, may make or lose money
- What's your objective?
- Net Portfolio matters
- In this case, you're locked-in

Illustration: Fixed-Price Hedge (e.g. Swaps / Forwards)



It's your net, or hedged exposure, you're concerned with, not the gain / loss on your hedge, per se.

Avoid Risk Management Pitfalls

- Paralysis by analysis
- Sub-optimal controls
- Management by committee
- Lack of expertise
- Too focused on price / market timing
- Poor communication
- Head in the sand
- Stop-start approach
- Restrictive policy
- Inadequate systems
- Poor forecasts

1 Pitfall: Not managing risks – Inaction!

Top 10 Reasons For NOT Hedging

10. Our risk management committee (RMC) hasn't decided on a strategy, or we haven't formed our RMC
9. Wall Street doesn't give us credit for hedging
8. Hedging loses money / Can't beat the market
7. Risk is a cost of doing business
6. Earnings volatility due to hedging (ineffectiveness)
5. Don't know how to hedge
4. Derivatives = speculation
3. In the long run it doesn't matter
2. One word: FAS133
1. 'We're still looking at that'

'Generally, companies don't start hedging until they've gotten burned a couple of times.'

Take-Aways

- Identify your exposures / risks
- Understand risk appetite / capacity / tolerance
- Determine alternatives for dealing with risks
- Outline hedging objectives
- Demonstrate the value in hedging
- Develop a robust risk management framework
- Focus on the portfolio of risks
- Be prepared for '*Black Swans*' – *action plan!*
- Communicate!
- Avoid others' *pitfalls*

It starts with the objective!

Resources

- Stowe, David W. **Derivative Blow-Ups**. *Treasury Update*. Strategic Treasurer. Volume 1 (Spring-2007). www.strategictreasurer.com
- Stowe, David W. **Top 10 Reasons Not To Hedge**. *Treasury Update*. Strategic Treasurer. Volume 2 (Fall-2007). www.strategictreasurer.com
- Stowe, David W. **Financial Risk Management Primer**. *Treasury Update*. Strategic Treasurer. Volume 3 (Spring-2008). www.strategictreasurer.com
- Stowe, David W. **Don't Cheer For Your Hedges!** *Treasury Update*. Strategic Treasurer. Volume 4 (Fall-2008). www.strategictreasurer.com
- Taleb, Nassim Nicholas. ***Fooled By Randomness: The Hidden Role of Chance in Life and in the Markets***. New York: Texere. 2004.
- Hull, John C. ***Options, Futures & Other Derivatives***. (Seventh Edition). NJ. Prentice Hall.
- Jeffery, Craig A. ***The Strategic Treasurer: A Partnership For Corporate Growth***. NJ: John Wiley & Sons, Inc. June-2009



*Practical Advice, Trusted Solutions,
Measurable Results*

Craig A. Jeffery

Managing Partner

Phone: 678.466.2222

Fax: 770.216-1547

Email: craig@strategictreasurer.com

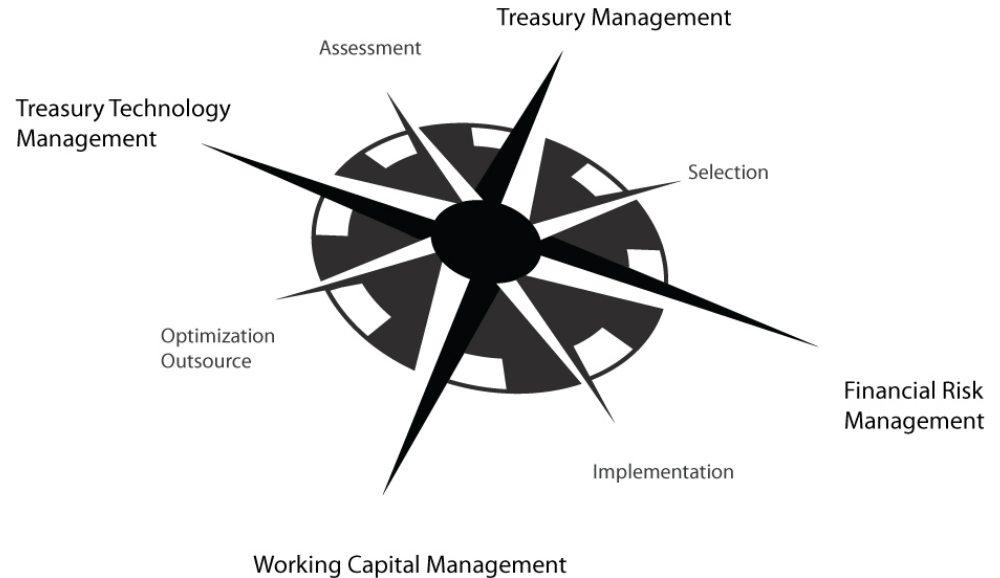
David W. Stowe, CFA

Director – Risk Management Practice Lead

Phone: 678.466.2235

Fax: 770.216-1547

Email: dstowe@strategictreasurer.com



STRATEGIC TREASURER LLC

500 Westpark Drive, Suite 110
Peachtree City, GA 30269

www.StrategicTreasurer.com



About Strategic Treasurer

STRATEGIC TREASURER is widely recognized and highly respected as the leading provider of advice and implementation assistance in treasury and risk management technologies. Their seasoned treasury specialists work alongside financial executives in treasury, and other related areas within corporate, government, education, and not-for-profit entities, providing treasury consulting services in:

Technology – Cash / Risk Management	Treasury Structure – Cash Management / Banking
Financial Risk Management / FAS133 Assistance	Working Capital Optimization

STRATEGIC TREASURER'S treasury specialists add value to their clients' projects through:

<i>Experience</i>	<i>Market Awareness</i>	<i>Project Assistance</i>
They've "sat in your seat" / worked on similar projects and know what to anticipate.	They continually survey the market of technology vendors and financial service providers to narrow the list of qualified candidates for their clients' specific needs.	This highly dedicated team of specialists provides additional, valuable resources.

STRATEGIC TREASURER can organize your priorities with a ***Treasury Assessment***.