



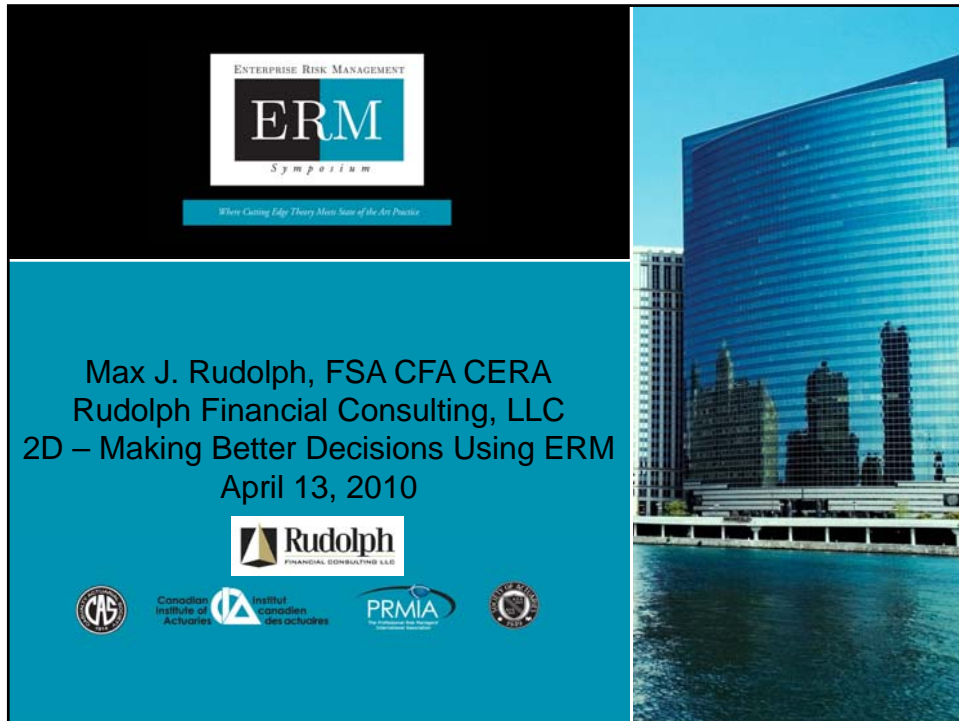
SOCIETY OF ACTUARIES

ERM Symposium
April 2010

2D - Making Better Decisions Using ERM


James Ramenda






Moderator
Max Rudolph

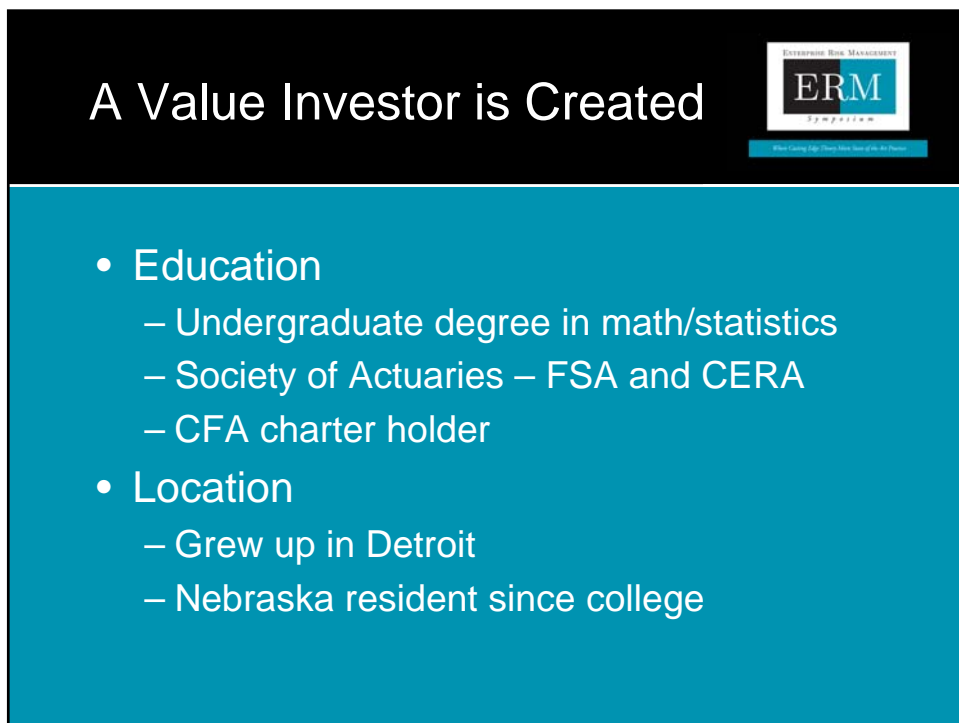


ENTERPRISE RISK MANAGEMENT
ERM
Symposium
Where Cutting Edge Theory Meets Some of the Art Practice

Max J. Rudolph, FSA CFA CERA
Rudolph Financial Consulting, LLC
2D – Making Better Decisions Using ERM
April 13, 2010


FINANCIAL CONSULTING LLC



ENTERPRISE RISK MANAGEMENT
ERM
Symposium
Where Cutting Edge Theory Meets Some of the Art Practice

A Value Investor is Created

- Education
 - Undergraduate degree in math/statistics
 - Society of Actuaries – FSA and CERA
 - CFA charter holder
- Location
 - Grew up in Detroit
 - Nebraska resident since college

Global Financial Crisis



What's Going On? There's More to It Than It Seems

- Culture
- Tail risk/contagion
- Outsourced decision making
- Misaligned incentives
- Mispriced risk
- Leverage

Investing: Four Filters



What's Going On? There's More to It Than It Seems

- Based on observations/teachings at Berkshire Hathaway
- Documented by Bud Labitan
 - The Four Filters Invention of Warren Buffett and Charlie Munger
 - Two Friends Transformed Behavioral Finance

Business Value vs. GFC



What's Going On? There's More to It Than It Seems

1. Do you understand it?
 - Outsourced decision making
2. Does it have a good story going forward?
 - Tail risk
3. Is management honest and competent?
 - Culture
 - Misaligned incentives
4. Is the price right?
 - Mispriced risk
 - leverage

Culture – Be a Skeptic



What's Going On? There's More to It Than It Seems

- ERM
 - Ask tough questions
 - What could go wrong?
 - What could go right?
 - Contrarian/outsider
 - Ethical culture
- Investing
 - What is the story?
 - Ask tough questions
 - What could go wrong?
 - What could go right?
 - Contrarian/outsider
 - Embedded culture
 - Sustainable competitive advantage

Leverage



What Counts (Up) There Must Count (in) the Balance Sheet

- ERM
 - Unique risks
 - Can't wait for markets to correct
- Investing
 - Low debt reduces risk (discount rate)
 - Patience
 - Learn from the mistakes of others
 - And your own ☺

Accruals on Balance Sheet



What Counts (Up) There Must Count (in) the Balance Sheet

- Hardest to value
- Lack of transparency
- Insider knowledge helps
- Easily manipulated

Latticework of Investing



What Counts (Up, Down, Over, Under, In, Out)

- Ben Franklin
- Evolve – be willing to change your mind
- Mosaic investing
- Mental models
 - Physics
 - Biology
 - Social sciences
 - Psychology
 - Philosophy

Case Study: Berkshire Hathaway



What Counts (Up, Down, Over, Under, In, Out)

- What business is it in?
 - Insurance as source of funds
 - Many fully owned subsidiaries
 - Portfolio
 - Stocks/bonds/preferred
 - Goal: maximize net worth over long time horizon



Where Cutting Edge Theory Meets Some of the Best Practice

Thank you!
Max J. Rudolph, FSA CFA CERA
Rudolph Financial Consulting, LLC
(402) 895-0829





Canadian
Institute of
Actuaries



Institut
canadien
des actuaires





James Ramenda, FSA CERA
Northington Partners, Inc.
2D – Making Better Decisions Using ERM
April 13, 2010



The Big Disconnect



Shareholder ERM
vs.
Corporate ERM

The Disconnect Hypothesis



What's Going On? There's More to It Than It Seems

Shareholder ERM

- Portfolio Management (not Trading)
- Sophisticated
- Should condition corporate ERM

Corporate ERM

- Shareholder expectations, plus...
- Financial incentives
- Behavioral aspects

Self-Generated Strategic Risk

- Defeats corporate ERM and...
- Shareholder ERM
- Need for "Independent Risk Audit"

Perspectives



What's Going On? There's More to It Than It Seems

- Sell-side equity analyst
- Buy-side fund manager
- Investment banker (M&A)
- Private equity manager
- "Stretch Management for Insurance Companies" (*The Actuary*, August '09)

ERM is Critical to Institutional Investors!



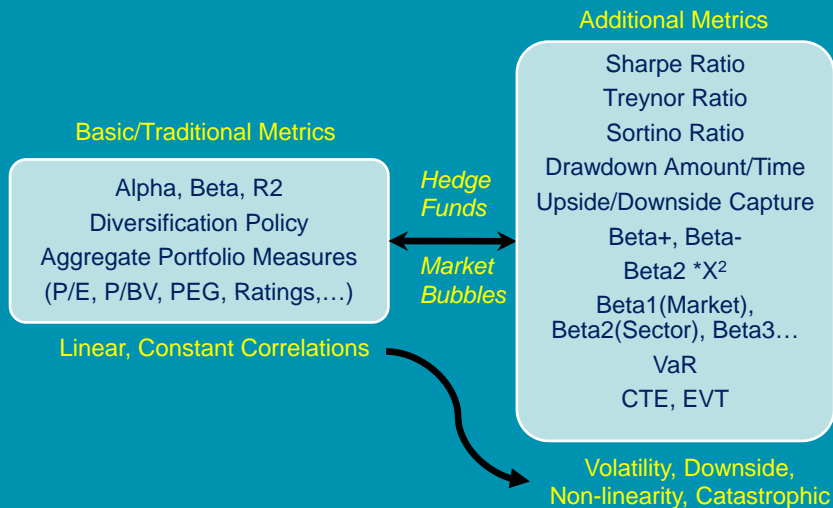
What Counts (Up, Down, How, How Often, At What Cost)

- Goal: better risk-adjusted return vs. benchmark
 - Marketing
 - Client expectations (“Style”)
 - Compensation

Metrics



What Counts (Up, Down, How, How Often, At What Cost)



From Shareholder ERM to Portfolio Company ERM



- Starting point: quest for alpha while keeping beta below benchmark
- Old adage:
 - *“Don’t confuse being smart with a bull market.”*
- New (quant) version:
 - *“Don’t confuse alpha with leverage.”*

Great Expectations



- Growth targets: 10%, 12%, 15%+, ...
 - Long-term GDP growth: ~5%
 - Long-term S&P 500 EPS growth: ~5%
 - Long-term S&P 500 dividend growth: ~5%
- Return on equity target: 15%+
 - 30-year downtrend in interest rates, inflation
 - Implied real returns vastly increased

Shareholder Influence on Portfolio Company ERM



- Board of directors
 - Usually passive
 - Activism is typically for special situations
- Direct meetings
- Wall Street (analysts, bankers)
 - Indirect: estimates, recommendations
 - Transmit investor expectations
 - Like-minded, growth-centric

ERM, Stakeholder Incentives & Behavioral Economics



- C-Suite
 - Non-linear on the upside (exponential)
 - Downside protection (base pay, benefits, change of control, golden parachutes...)
 - Typically: risk-takers, successful, optimists
- Board of directors
 - Incentives scaled down, mindful of litigation
 - Same mindset, same life experiences
 - “Stretch goals”

Wall Street as a Stakeholder



What's Going On? There's More to It Than It Seems

- Analysts, advisors...and stakeholders
- Benefit greatly from clients' growth
- Same mindset as C-Suite
- Historically, avoided their clients' downfalls:
 - *"We're a moving company, not a storage company."*
- Not so in 2008 crash

Other Stakeholders



What's Going On? There's More to It Than It Seems

- Aren't exponential to the upside, suffer heavily the downside
 - Employees
 - Rating agencies
 - Regulators
 - Customers

Special Stakeholder: Distribution



What's Going Up? There Must Be Something Down!

- Volume, not profitability, is the upside
- Time horizon mismatch
 - Insurance agents, mortgage brokers
 - Up-front compensation
 - Business has 30-year profit emergence

Stakeholder Outcomes Per Company Outcomes



What's Going Up? There Must Be Something Down!

	Stakeholder	Upside	Downside
Decision Makers	C-Suite	Exponential	Buffered
	Board	Exponential	Buffered
	Wall Street	Exponential	Buffered
	Distribution	Volume, Not Profits	Fractional
ERM	Shareholder	Linear/Leveraged*	Linear/Leveraged*
	Employees	Fractional	Catastrophic
	Rating Agencies	Nominal	Catastrophic
	Regulators	Nominal	Catastrophic
	Customers	Nominal	May Be Catastrophic

* Depending on the structure of the investment fund, use of leverage, long-short, fee structure, etc.

Echo Chamber: C-Suite, Board, Wall Street



- Expectations = Estimates = Guidance = High Growth Target
- Exponential incentives
- Behavioral aspects (“Stretch Management”)
 - Goal is known (high); how to get there is not
 - Fits the mindset: confident, successful, risk-taking, optimistic
 - Overestimate the upside, underestimate the downside

Where Does it Lead? Quantity > Quality



Great Expectations Met With Leverage & “Stretch”



- Financial (balance sheet) leverage
- Operating leverage: stretch for earnings
 - Grow reported earnings now
 - Take on asymmetrical risk/rewards
- Risks exacerbated in long-tailed businesses
 - Lending, insurance
 - Timing mismatch: reported vs. ultimate earnings
 - Distribution compensation

Self-Generated Strategic Risk



- Risk due to decisions not forced by:
 - Competitors
 - Changing consumers, changing technology
 - Regulation, taxes, other external, etc.
- Failures not due to the ERM process
- Strategic failures; insurance examples:
 - First Executive (ALM?)
 - “Old” Consec (acquisition cost/leverage?)
 - Variable annuity products (market crash?)

Toyota



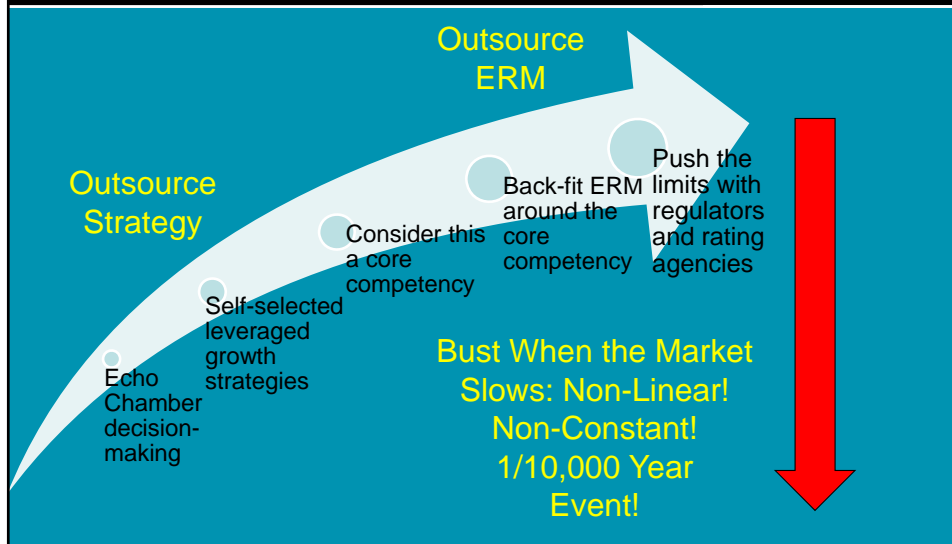
What's Going On? There's More to It Than It Seems

- *"I fear the pace at which we have grown may have been too quick..."*
-- Akio Toyoda
- 11% global share not good enough
- Why not - scale? Pricing power? GM?
- Boost growth, lose control over quality
- Catastrophic loss: Hard-earned reputation for reliability damaged

Mechanics of the Disconnect



What's Going On? There's More to It Than It Seems



Investors Seek Alpha; End Up With...



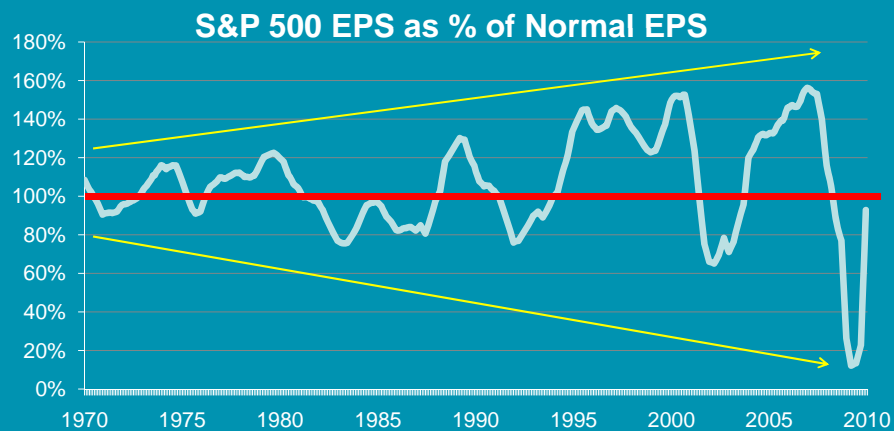
What's Going On? There's More to It Than It Seems

- “Multi-leveraged” companies:
 - Asymmetrical risks (financial and operating)
 - Non-linear, non-constant correlations with the market/economy
- Negatively skewed (“spikey”) outcomes
- Up-end the assumptions of key risk metrics
- Defeats investors’ ERM
- Recognized with newer metrics, ex post

Is This What Owners Want?



What's Going On? There's More to It Than It Seems



Source: Standard & Poor's, Robert J. Shiller, Northington Partners

The New Normal?



What's Going On? There's More to It Than It Seems

- Not so new:
 - Need good credit to get a loan
 - Have to have a job, down payment, to mortgage a house
 - Save some % of income
- Shareholders act like business owners?
 - Not traders
 - Activism before the crisis emerges

Opinion



What's Going On? There's More to It Than It Seems

- Independent (external) ERM Audit
- Analogous to independent accounting audit
- Focused on risks, ranges of outcomes, alignment of incentives
- Not subject to the internal hierarchy (Lehman)
- Disclosure of risk audit to shareholders
 - Non-linearity, skewness, etc., ex ante
 - Feed & reinforce shareholders' ERM