GLOBAL RISK MANAGEMENT

Presentation to:

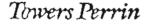
Risk Management Conference

Lieges, Belgium

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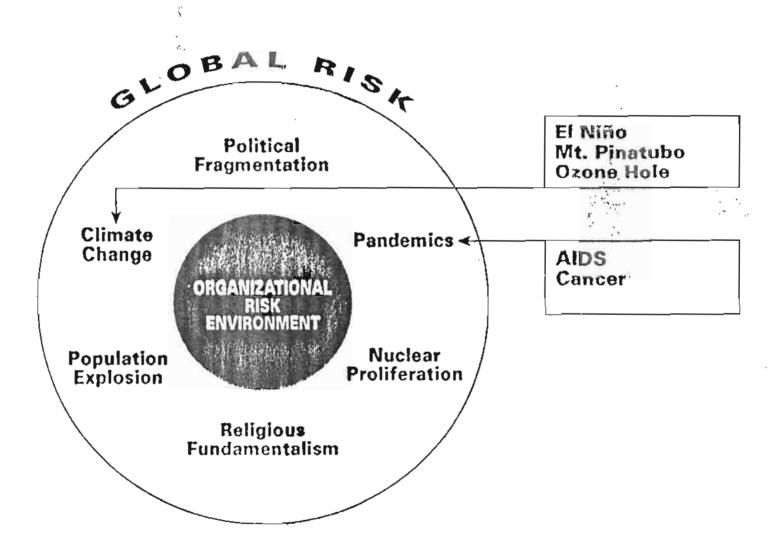
- 1. Global environment and the need for risk management
- 2. Defining and describing global risk management
- 3. Fundamental issues
 - The public perception of risk
 - Understanding catastrophes
 - Risk awareness through scenario analysis
- 4. Principles for organizational response
- 5. Conclusions



"THE NEW WORLD ORDER"

- Increased interdependency
- Increased uncertainty





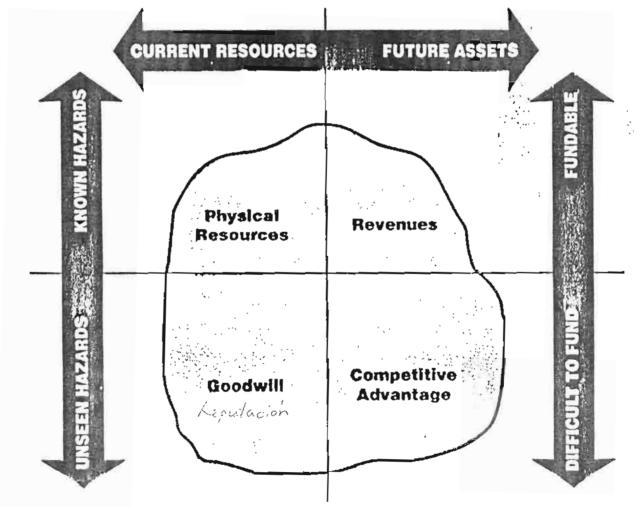
Organizational Risks Securities Personnel Operational Commodities Physical damage **GLOBAL RISKS** Consequential Interest rate Financial/Market Criminal Currency PLACMIMIATION Credit Data CUMAII PANDENICS (HANGI War Contractual ||ab|||lty Social POPULATION PROUBLEATION UNION **Political** Professional Terrorlem Liability TUKNOUS Tort Liability State action Legal Statutory Hability Regulations

BUSINESS RISKS

Source: H.F. Kloman, "Rethinking Risk Management", Geneva Papers, July, 1992

HAZARD RISKS

The "assets" that risks (and losses) affect



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isk," Risk Management Reports, May/June 199

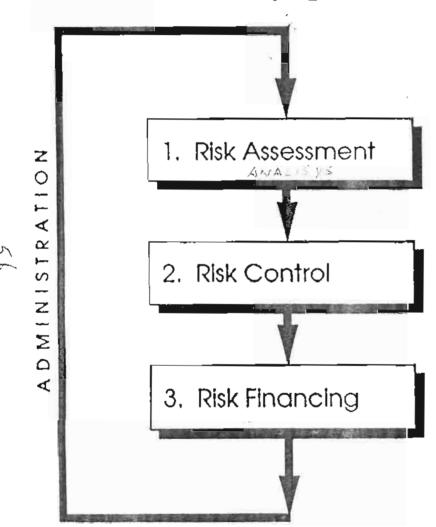
Risk:

The compound estimate of the probable frequency, probable severity and public perception of harm.

Risk
Management:

A discipline for living with the possibility that future events may cause harm.

■ The three key questions



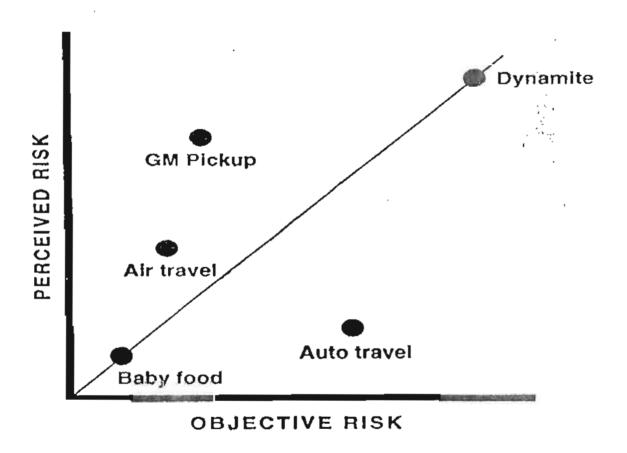
What can go wrong?

What can we do about it?

How do we pay for it?

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■ The public perception of "risk" and "harm" is constantly changing



Source: Frank W. Sterrett, "Risk Equilibrium," Risk Management Reports, March/April 1992

Understanding catastrophes

- Law of conservation of catastrophes: McNeill
- McGannon's maxim:
 - 3 "near misses" per \$1 million of revenue
 - 2 "incidents" per \$100 million of revenues
 - 1 "major loss" per \$8 billion of revenues
 ("Major loss" is 1% of either revenues or retained earnings)
 - 1 "catastrophe" every 10 years ("Catastrophe" is 150% of annual profit)



Risk awareness through scenario analyses

A. Peter Schwartz: "The Art of the Long View" (1991)

- 1. Identify focal issue or decision
- 2. Identify key environmental factors
- Identify "driving forces"
- 4. Rank factors and forces
- 5. Select scenario logics
- 6. Flesh out scenarios
- 7. Identify implications
- 8. Select leading indicators and signposts

Risk awareness through scenario analyses

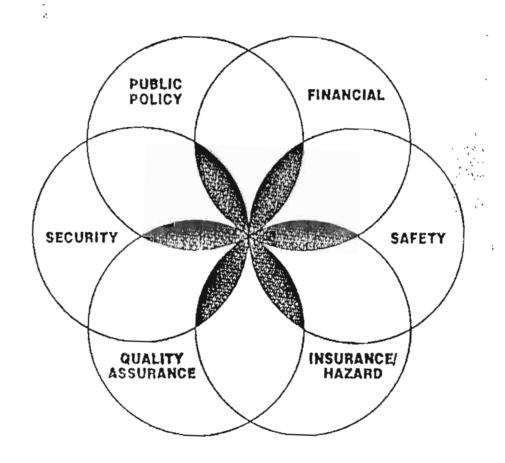
B. Vernon Grose: "SMART System"

- 1. Define inputs and outputs of "system"
- 2. Prepare "functional flow block diagram".
- 3. Identify risks through written "scenarios" (local teams)
- 4. Identify possible countermeasures (responses)
- 5. Determine costs for each countermeasure
- 6. Assign frequency and severity probabilities
- 7. Use a "risk jury" to evaluate and merge scenarios
- 8. Assemble scenarios into a "risk totem pole" salanco
- 9. Implement selected countermeasures
- 10. Update scenarios and totem pole

Source: Vernon Grose, "Managing Risk: Systematic Loss Prevention for Executives," Omega Systems, 3rd Edition, Johnson City, TN, 1992

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Harness skills of multiple disciplines



Crisis management/contingency planning is the key

Administration principles

- 1. Create and sustain management commitment to risk management
- 2. Adopt clearly defined structure for RM responsibilities
- 3. Develop clearly targeted annual objectives
 - Risk assessment
 - Risk control
 - Risk financing
- 4. Maintain communications with all levels, globally

Above all: Be strategic and be flexible

Managing "Uncertainty" Versus "Exposures"

	Managing "Uncertainty"	Managing "Exposure"
Focus	Less predictable events Longer term (5-50 years) Catastrophe potential	More predictable events Shorter term (1-5 years) Non-catastrophic potential
Mode of operation	Strategic planning	Budgeting
Other functions involved	Strategic planning Public relations Board oversight Senior management responsibility	Tactical planning Legal Human resources; safety Transportation Business unit responsibility
Orientation	External, with public relations Project reputation	Internal, with human resources and communications Project earnings; balance sheet

Source: Michael Levin, Risk Management Reports, September/October 1993

Managing "Uncertainty" Versus "Exposures": Risk Management Tools

	Managing "Uncertainty"	Managing "Exposure"
Assessment	Scenario analyses Probabilistic risk analysis Fault tree analysis Delphi technique	Actuarial projections Monte Carlo simulations
Control	Avoidance Mitigation	Prevention Claims management
Financing	Pooling Catastrophe insurance Contingency financing Governmental financing	Budgeting Cost containment Captive insurance
Administration	Contingency planning/crisis management Senior management responsibility	Vendor management Information systems (MIS) Business unit responsibility

Source: Michael Levin, Risk Management Reports, September/October 1993

Global interdependencies and uncertainties require a new, more holistic, more strategic response to risk

- Risk-based decision making is multi-disciplinary
- Risk management should consider the potential effects of both global and organizational risk
- Risk assessment and risk response are the responsibilities of every person in an organization
 - Goal: Help an organization live with uncertainty in a productive and prudent manner

H. Felix Kloman

Mr. Kloman is a Principal and Vice President of Tillinghast, a Towers Perrin company, based in Stamford, Connecticut. He received a B.A. degree (cum laude) in History from Princeton University in 1955 and then served two years as an officer in the United States Navy in the Far East.

Mr. Kloman began his career with a Philadelphia insurance brokerage and consulting firm, becoming a partner in 1965. In 1967 the firm merged with Alexander & Alexander, where Mr. Kloman served as an assistant vice president in the Consulting Division. In 1970, he founded Risk Planning Group, Inc., an independent risk management consulting firm, which merged into Tillinghast, Nelson & Warren in January 1985. Tillinghast in turn merged with Towers, Perrin, Forster & Crosby in July 1986.

Throughout his career, Mr. Kloman has been active in risk management consulting studies for corporate, financial, educational, and governmental clients. This work has involved risk analyses and reviews of insurance, self-insurance, and risk management administrative functions, as well as strategic planning for financial institutions. He has led studies on the use of captive insurance companies and has coordinated captive and pooling studies for universities, railroads, hospitals, chemical companies, engineering firms, and municipalities, among others.

The author of over 60 published articles, Mr. Kloman is editor of Risk Management Reports, a bi-monthly since 1974, and The Delphian, the bi-monthly journal of risk management for institutions of higher education. He is a Director and a member of the Scholarship Committee of the Spencer Educational Foundation, a Fellow of the Institute of Risk Management, and a member of the Society for Risk Analysis, the World Future Society, and the Institute of Management Consultants, holding the professional designation CMC (Certified Management Consultant). A frequent speaker on risk management in the U.S., Canada, Europe, and Asia Pacific, he is also a visiting lecturer at the Graduate School of St. Gallen, Switzerland.

Recent articles by Mr. Kloman include:

"Making Risk Management Work in the University," The Delphian, August-September 1992.

"Rethinking Risk Management," The Geneva Papers, July 1992.

"Corporate Risk Management: A Global Perspective," Canadian Insurance, July 1992.

"Captive Insurers in the Key of C," Risk Management, April 1992.

"Aspects of a Novel Situation," Papers of European Insurance Forum, Financial Times, February 1991.

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