RISK MANAGEMENT AND RISK FINANCING ALTERNATIVES

by Mr. Kenneth J. Le Strange*

[The following article is a presentation by Mr. Kenneth J. Le Strange, President, AM-RE MANAGERS, INC., Princeton, New Jersey, for the IIIRM Conference in Bombay, India. The presentation occurred during Plenary Session - V, on October 13, 1995. Timeliness and importance of the article are evidenced by the fact the presentation has been published in the January issue of the RIMAS Journal and in the Institute of Company Secretaries of India's journal "Chartered Secretary". We are grateful for Mr. LeStrange's input and wish to express our appreciation to AM-RE MANAGERS for allowing us to include this valuable presentation in our current publication.

AM-RE MANAGERS, INC. was established in 1988 by American Re-Insurance Company for the purpose of going after the alternative market. According to an article appearing in the July 1995 issue of the Institutional Investor, "U.S. property and casualty reinsurance has been treading water in an overcrowded, soft market for nearly ten years". It seems the traditional purchasers of reinsurance, property and casualty insurance companies in particular, have not been buying enough reinsurance to support the industry. Thus reinsurers have turned to other methods of using their capital. One such method is the alternative market. It is believed that over 15 reinsurance companies now operate alternative-risk departments. AM-RE MANAGERS may have been the first U.S. reinsurer to go after the alternative market—Editor.]

* A presentation prepared by Kenneth J. Le Strange, President, AM-RE MANAGERS INC., Princeton, New Jersey, for the IIIRM Conference in Bombay, India, -Plenary Session-V, held on October 13, 1995.
Our rapidly changing, increasingly complex global economy has created an expanding array of risks to be managed if the viability and success of an enterprise are to be ensured. The challenges and demands of contemporary markets, customers, regulators, employees and shareholders present organizations with an interesting paradox: it is the intelligent assumption of risk, not its avoidance, that creates value in a company. This environment has caused a basic shift in the paradigm of risk management practices, and has placed greater emphasis on the successful identification, quantification, mitigation, control and financing of risk. Sophisticated managers of risk utilize an eclectic selection of risk management solutions that transcend traditional insurance risk transfer products. Evolving concepts of risk are leading to complex management perspectives requiring an integrated view of the finances and operations of a corporation. Today’s risk manager must generate a comprehensive context of risks facing the organization, and become a catalyst for successful risk taking by the enterprise.

Risk is a difficult concept to define. Most definitions focus upon the negative consequences of risk assumption: the creation of exposure to the chance of injury or loss. For most people, risk signifies danger and is something to be avoided, if possible. Yet within the concept of risk is another element—opportunity, and the rewards that inure to those who assume risk successfully. It is impossible for an individual or an organization to avoid risk. All choices, decisions and activities, even decisions not to act contain risk. Our challenge is to carefully select the risks we assume, quantify them properly and to ensure that the rewards attendant with our assumption of risk are greater than the potential for loss. In practice, this challenge is quite difficult due to the dynamic nature of risk, the number of dependent and independent variables affecting risk and the difficulty in developing reliable information to support risk assumption decisions.

The challenge is particularly complex for corporations operating on a global scale. The size, scope and complexity of a global company’s activities inhibit the creation of a relevant and meaningful definition of risk encompassing every conceivable situation. A definition of business risk must be flexible and evolve with the changing activities of the corporation.

As a framework for our exploration of risk management and risk financing alternatives, let us use the following, and admittedly imperfect definition of risk: Business risk is the possibility that an event, action or inaction
will not positively affect the organization's ability to increase shareholder value. The strength of this definition stems from its focus on positive results (successful risk taking) and the benchmark of increasing shareholder value as a standard for achievement.

Having developed a working definition of risk, we turn to the task or identification of risk sources and exploration of the forms of risk. Historically, the practice of risk management has been confined to traditionally insurable risks such as loss from fire, earthquakes, wind, flood, legal liability and other relatively straightforward potential causes of loss. Solutions involving the purchase of insurance were emphasized, with focus on type of coverage, adequacy of limits and cost of risk transfer. Over the last thirty years, most major corporations have evolved to much more sophisticated view of risk management, certainly encompassing traditional risk management concerns but adding new issues arising from the changing internal and external environments they work within. Now it is understood that virtually every aspect of a company's operational and financial activity contains the potential for risk that can negatively and meaningfully affect the success and viability of the organization.

Sources of Risk

Each corporation operates in an external environment where actions or influences beyond its control may impact the success of the organization. This environment may vary substantially from market-to-market, country-to-country, as well as by product or service offered to customers. A proactive approach towards the identification of risk requires accurate and timely information from a variety of disparate sources. This generally involves substantial investment in research targeted at external constituencies such as markets, customers, vendors, competitors, regulators, analysts, investors, technology, economies and political systems. The analysis performed must evaluate external factors in the context of the corporation's current and future strategic plan, to ensure that business goals are appropriate and achievable. It must also focus upon the functional aspects of the business, i.e., products, services, manufacturing, distribution, transportation, innovation, process management, organization structure and other issues critical to the operations of the corporation. Finally, external factor impact upon the financial structure and performance of the corporation must be evaluated.
Sources of External Risk

Each corporation is part of a complex and dynamic environment that is increasingly global in scope. Despite this, many of the corporation's activities are conducted locally. A dichotomy is created within the organization, stemming from its need to balance the "macro" vs. "micro" perspective. Successful companies integrate the two perspectives into strategic and technical plans. The following chart identifies examples of key sources of external risk and their associated manifestation of risk.

External sources of Risk

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>MANIFESTATIONS</th>
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<tbody>
<tr>
<td>Political</td>
<td>Expropriation</td>
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<td></td>
<td>Regulatory</td>
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<td>Trademark/Intellectual</td>
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<td>Capital</td>
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<td>Profit Limitations</td>
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<td></td>
<td>Taxes</td>
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<tr>
<td>Economic</td>
<td>Inflation</td>
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<td></td>
<td>Currency</td>
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<td></td>
<td>Market</td>
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<tr>
<td>Competitor</td>
<td>Pricing</td>
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<td></td>
<td>Revenue</td>
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<td></td>
<td>Profitability</td>
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<td></td>
<td>Market Share</td>
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<td></td>
<td>Customers</td>
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<tr>
<td>Technology</td>
<td>Obsolescence</td>
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<td></td>
<td>Cost Efficiency</td>
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<td></td>
<td>Time</td>
</tr>
<tr>
<td>Shareholder</td>
<td>Liability</td>
</tr>
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<td></td>
<td>Value of Corporation</td>
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<tr>
<td>Financial Markets</td>
<td>Availability of Capital</td>
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<td></td>
<td>Growth</td>
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<td></td>
<td>Cost Efficiency</td>
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<tr>
<td></td>
<td>Credit</td>
</tr>
<tr>
<td>Customer</td>
<td>Internal Sourcing</td>
</tr>
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<td></td>
<td>Changes in Needs</td>
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</tbody>
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Internal Sources of Risk

Internal risks contain substantial opportunity for improving shareholder value through aggressive identification and management. Unlike external risks, internal risks are susceptible to precise quantification and often may be unilaterally managed by the entity. A successful corporate risk management strategy requires an integrated, cohesive approach involving four key internal constituencies: Management, Operations, Finance and Technology.

Risk may be resident in and isolated to a particular function or process. More frequently, risks transcend processes and have impact on a variety of areas within the company. These risks present difficult risk management challenges, but also provide the largest benefits when managed effectively.

Management

Management support is essential to any integrated risk management effort. The Chief Executive Officer sets the tone for a company's culture, priorities,
style and ethical philosophy. The CEO is also responsible for the strategic direction of the organization. Management's challenge is to identify all significant sources of external and internal risk, and to direct the company's activities to appropriately manage the risks identified. The following chart describes a series of four management activities that provides a systematic and integrated approach to risk management at the corporate level.

**Management Risk**

1. **Evaluate/Quantify External Risks**
2. **Develop Strategic Response**
3. **Design Process Response**
4. **Evaluate Corporate Performance**

**Evaluate/Quantify External Risks**

A realistic view of external risks is essential to the creation of a viable strategic plan. To form a realistic and accurate perspective, management should:

- Create an ongoing process for the systematic collection and evaluation of information relating to external risks.
- Identify and collect information from appropriate sources relating to significant external risks; i.e., Political, Economic, Competitor, Technology, Shareholder and Financial Markets.
- Quantify and evaluate information collected with an emphasis on prospective changes. Communicate information effectively within the organization.

**Develop Strategic Response**

During this phase, management throughout the organization participates in the creation of a decision making process focused upon appropriate management of the organization's risks. Strategic responses will include:

- Identification of individuals or teams with the knowledge and experience to be empowered with decision responsibility.
- Development of strategic goals
and objectives for the management of risk.
- Creation of a framework for the quantification of risks and risk/reward tradeoffs.
- Development of authority and responsibility levels, within functions and across functions.

**Design Process Response**

This step involves the marshaling of internal resources, business units and processes to successfully respond to external risk factors. Management's most significant responsibility during this phase is to allocate resources to the opportunities selected that present the corporation with attractive return potential with acceptable levels of risk. Characteristics of this phase are:

- Development of a framework for the evaluation of investment of physical, human or capital resources.
- Identification of appropriate standards for investment decisions, such as ROIC, EVA or CFROI.
- Alignment of new and existing resources to respond to risk or opportunity.

**Evaluate Corporate Performance**

Our final management step involves the use of performance measures to evaluate the outcomes of management risk acceptance decisions. The selection of appropriate performance criteria is critical to the success of the evaluation process. Hallmarks of an effective measurement system include:

- Selection of measures that correlate to corporate strategies with external performance goals.
- Performance goals measure individual processes and groups of processes and
- Measurements change with changes in the external environment.
- Measurement criteria are balanced with appropriate views of time-frame, cost, quality and sustainable performance.
- Close alignment with strategic goals and strategies.

**Operations, Finance and Technology Risks**

The same type of risk management process described for management
at the corporate level must be applied to the operational processes of the company, its financial activity and the technology utilized to create and sustain competitive advantage. To provide a context for our discussion on risk financing alternatives, we will quickly review the types of risk inherent in each internal category:

### Operations Risk Profile

<table>
<thead>
<tr>
<th>Product/Service Quality</th>
<th>Cost Effectiveness</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research/Product Development</td>
<td>Customer Retention</td>
<td></td>
</tr>
<tr>
<td>Human Resources/Labor</td>
<td>Vendors</td>
<td></td>
</tr>
<tr>
<td>Raw Material Pricing</td>
<td>Natural Catastrophe</td>
<td></td>
</tr>
<tr>
<td>Franchise</td>
<td>Capacity</td>
<td></td>
</tr>
<tr>
<td>Legal/Regulatory Compliance</td>
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</tr>
</tbody>
</table>

### Financial Risk Profile

<table>
<thead>
<tr>
<th>Credit</th>
<th>Currency</th>
<th>Collateral</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rates</td>
<td>Economic</td>
<td>Liquidity</td>
<td>Derivatives</td>
</tr>
<tr>
<td>Investment Assets</td>
<td></td>
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</tbody>
</table>

### Technology Risk Profile

- Obsolescence
- Selection/Investment/Implementation GAP
- Cost
- Innovation
- Proprietary
- Integrity
- Availability at Decision Points

### Risk Financing Alternatives

As the art and science of risk management has evolved from an activity oriented towards the purchase of insurance to a broader, more integrated function, the array of risk financing alternatives has also evolved and expanded. Among the largest corporations, first dollar risk transfer with bundled service and standard policy forms has been replaced with a variety of more effective and flexible solutions to risk management issues. Two important concepts underpin the utilization of risk financing alternatives to traditional insurance:

1. Large corporations have rationalized their risk taking over a wide span of corporate activities. In general, retention and management of risk has supplemented the purchase of first dollar insurance.
2. The magnitude of risks faced by large corporations now routinely
exceeds the capacity available from traditional insurers. Financial markets have responded with alternatives to traditional risk transfer insurance and reinsurance.

There are an increasing number of risk financing techniques available to the progressive risk manager. This chart identifies a number of the most common alternatives utilized by large corporations today:

**Risk Financing Alternatives**

- Single Parent Captive
- Self Insured Retention
- Group Captive
- Loss Responsive Rating Plans
- Large Deductible Program
- Finite Risk Transfer
- Hedging, Derivatives
- Risk Securitization

**Self Insured Retention**

This type of program is implemented where a jurisdiction permits an organization to statutorily self insure an increment of exposure for a line or lines of coverage. Excess of loss insurance is then purchased by the company above that level for the limits of coverage desired.

The common SIR features include:
- Experience driven cost
- Retention of loss frequency
- Cost efficiency

becoming domiciled in tax havens such as Bermuda.

The steady erosion of tax benefits in a number of jurisdictions has substantially changed the motivations leading to utilization of single parent captives. Today, a corporation's objectives are likely to include one or more of the following:

- Experience driven cost
- Capacity
- Breadth of coverage
- Coverage for commercial uninsurable risks
- Cost efficiency
- Budget stabilization allocation
- Risk financing flexibility
- Access to reinsurance market
Financial size, stability requirements
Unbundling of services
Control of claims decisions
Management of market cycles
Avoidance of residual market taxes

Large Deductible Programs

In jurisdictions where self insurance is prohibited or difficult to implement, and a captive insurance company is also not viable, large deductible programs provide many of the benefits of these two approaches. This style of program involves the issuance of a first dollar insurance policy to comply with local regulations, but includes a deductible feature that allows the insured to retain predictable levels of loss activity. Here, the features include:

- Experience driven cost
- Cost Efficiency
- Unbundling of service
- Ease of regulatory compliance
- Collateral requirements
- Insurer insolvency risk
- Reduction of residual market exposures
- Market cycle management

Loss Responsive Rating Plans

Many insureds have invested substantially in risk management and loss control with the goal of reducing losses and insurance costs. Loss sensitive rating plans provide a formal and flexible way to reward the insured for risk improvements. The features may include:

- Experience driven cost
- Fixed insurer margin
- Stop Loss Insurance feature
- Budget destabilization
- Collateral requirements
- Dividend potential

Finite Risk Transfer

Financial reinsurance of finite risk transfer provides a sophisticated and flexible alternative to self insurance or pure risk transfer. This type of transaction has attracted increased attention from tax authorities and accounting firms seeking to disallow or reduce the benefits available to the insured under the program, whose characteristics include:

- Equity in premium
- Investment income credit
- Coverage
- Tax advantages
- Experience driven cost
- Fixed cost
- Unbundled services
• Claims control
• Risk transfer
• Capacity

Group Captives

Group captives are generally created when an insurance market disruption reduces capacity available to an industry group or type of coverage. Group captives are owned by their policyholders, capitalized by them, and provide the coverage and capacity required by their owners. Examples of successful group captives include O.I.L. and O.C.I.L. (Oil Industry), E.I.M. (utilities) and PRIMEX (Chemical Industry). The characteristics here include:
• Coverage
• Capacity
• Stability
• Investment return
• Homogeneous class and/or coverage
• Owner driven management

Commodity Futures, Derivatives, Currency Hedging, Risk Securitization

The increasing array of financial risk management tools available to Chief Financial Officers has created a broader view of risk transfer alternatives within the organization. In addition to the risk retention, risk financing, and insurance risk transfer options already described, a new group of transactions and risk bearers have emerged over the last five years. This is an exciting new frontier of risk management where innovative and creative solutions to exposure are being created. It is an area of danger as well, where poorly understood or utilized transactions can bankrupt a corporation in breathtakingly short periods of time. Some common characteristics of the Financial Techniques include:
• Exposure/hedge mismatch
• Counterpart risk
• Capacity
• Cost efficiency
• Liquidity
• Covenants

Innovate

Our review of risk management and risk financing alternatives has been necessarily brief and general in nature. It is clear that the fields of risk management, risk financing, insurance and other financial products are evolving and changing at a very rapid rate. This dynamic environment places emphasis on innovation, speed, talent and experience. As insurance professionals, we will be serving ever more sophisticated and demanding clients. Our competitors will include the familiar group we currently
compete with, but will be joined by a new breed of competitors from the fields of finance, investment banking, banking and consulting. We will look back on the decade of the 1990's as a time of revolution in our industry.

"I don't know who my grandfather was. I am much more concerned to know what his grandson will be." — Abraham Lincoln.

"The worst tragedy for a poet is to be admired through being misunderstood." — Jean Cocteau.

"When you have nothing to say, say nothing." — Charles Caleb Colton.

"If a book is worth reading, it is worth buying." — John Ruskin.

"There are two tragedies in life— One is not to get one's heart's desire. The other is to get it" — George Bernard Shaw.