Superintendencia de Valores y Seguros de Chile

Risk-based Supervision Model for the Insurance Industry

FIRST
initiative

LS&A

Drivers of Change in Financial Supervision

- Over the past 20 years – and particularly now – many financial “meltdowns” and crises that have crippled national economies
- Contagion impact: world economies are inter-connected
- Huge impact on the public

LS&A

5 Lessons Learned from the Crises

1. **Insurer Governance:**

   a. **Companies with good internal controls, effective risk management and strong corporate governance are more resilient to turbulent financial conditions than poorly managed institutions.**

   b. **So the board and senior management of every financial institution must ensure that the company is operated in accordance with sound business and financial practices.**

   c. **<u>No supervisory system can be effective in an environment where institutions are poorly managed.</u>**

5 Lessons Learned from the Crises

2. Supervisory laws and practices focus on management responsibility for having in place appropriate standards of corporate governance, internal controls and risk management.

5 Lessons Learned from the Crises

2. Supervisory laws and practices focus on management responsibility for having in place appropriate standards of corporate governance, internal controls and risk management.
3. Supervisory reliance: greater reliance of Independent Professionals in the supervisory process

5 Lessons Learned from the Crises

2. Supervisory laws and practices focus on management responsibility for having in place appropriate standards of corporate governance, internal controls and risk management.
3. Supervisory reliance: greater reliance of Independent Professionals in the supervisory process
4. Risk Based Supervision:
    a. Supervisors require structured processes to assess risk across institutions and to allocate their resources to situations representing higher levels of risk.
    b. Processes need to be transparent so supervised institutions understand the basis on which they will be assessed and will govern themselves accordingly.

LS&A

5 Lessons Learned from the Crises

5. Supervisory capital requirements are risk based, i.e. as risk levels within the insurer increase, the capital level must increase as well.

LS&A

The Canadian Experience

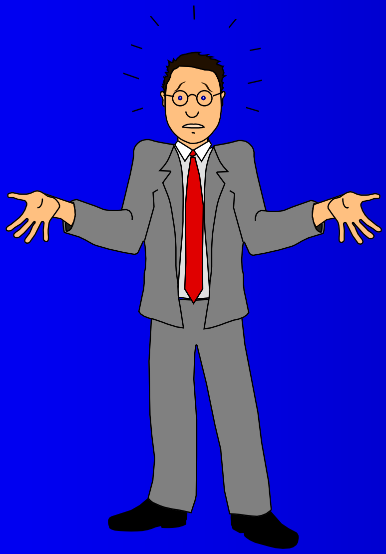
The Canadian Experience

- 1960’s: many years with no insolvencies
- Late 1970's, 1980's: higher inflation, volatile interest rates
- 18 general insurer insolvencies between 1980 and 1993! Several life companies fail, including one of Canada’s largest

The Canadian Experience

What were the root causes of the insolvencies?

- **Regulators not understanding what was happening? NO**
- **Companies not following the Insurance Act and directives? NO**



LS&A

The Canadian Experience

The root cause in every case was POOR MANAGEMENT:

- lack of board oversight and governance
- under pricing of business, cash flow underwriting
- overly rapid growth
- lack of underwriting controls
- poor quality reinsurance or reinsurance controls
- related party investments . . .

LS&A

The Canadian Experience

The Insurance Act didn't address the issue of how the company managed its business.

Realization: In fundamental sense, traditional financial supervision could not have prevented the failures.

Something different was needed . . .

Corporate Governance

1. Internal policies and procedures intended to ensure that the company is operated in accordance with sound business and financial practices.
2. The fiduciary responsibilities of financial institutions suggest that especially high standards of corporate governance will be expected.
3. The quality of the institution’s risk management is an important part of corporate governance.
4. The Insurance Law can establish overall goals and make boards of directors more accountable.

Reliance

1. Insurance supervisors lack the resources to become intimately familiar with every aspect of insurer operations.

2. Therefore they need to enlist the assistance of other professionals who can help to carry the responsibility of monitoring.

3. If auditing/actuarial standards are not sufficiently high to enable supervisory reliance, priority can be given to raising standards.

4. Insurance Law can set out role and responsibility of auditors and actuaries, making them an important part of the supervisory framework.

Corporate Governance

Board

Responsible for overseeing, appointing, statutory duty of care

Corporate Governance

Board

Responsible for managing, appointing statutory duty of care

Audit Committee

Majority of independent director members

LS&A

Corporate Governance

Board

Responsible for managing, appointing
Statutory duty of care

Audit Committee

Majority of independent director members

Auditor

Financial Reporting, Well Being

Management

Input and advice in all areas, Internal Audit

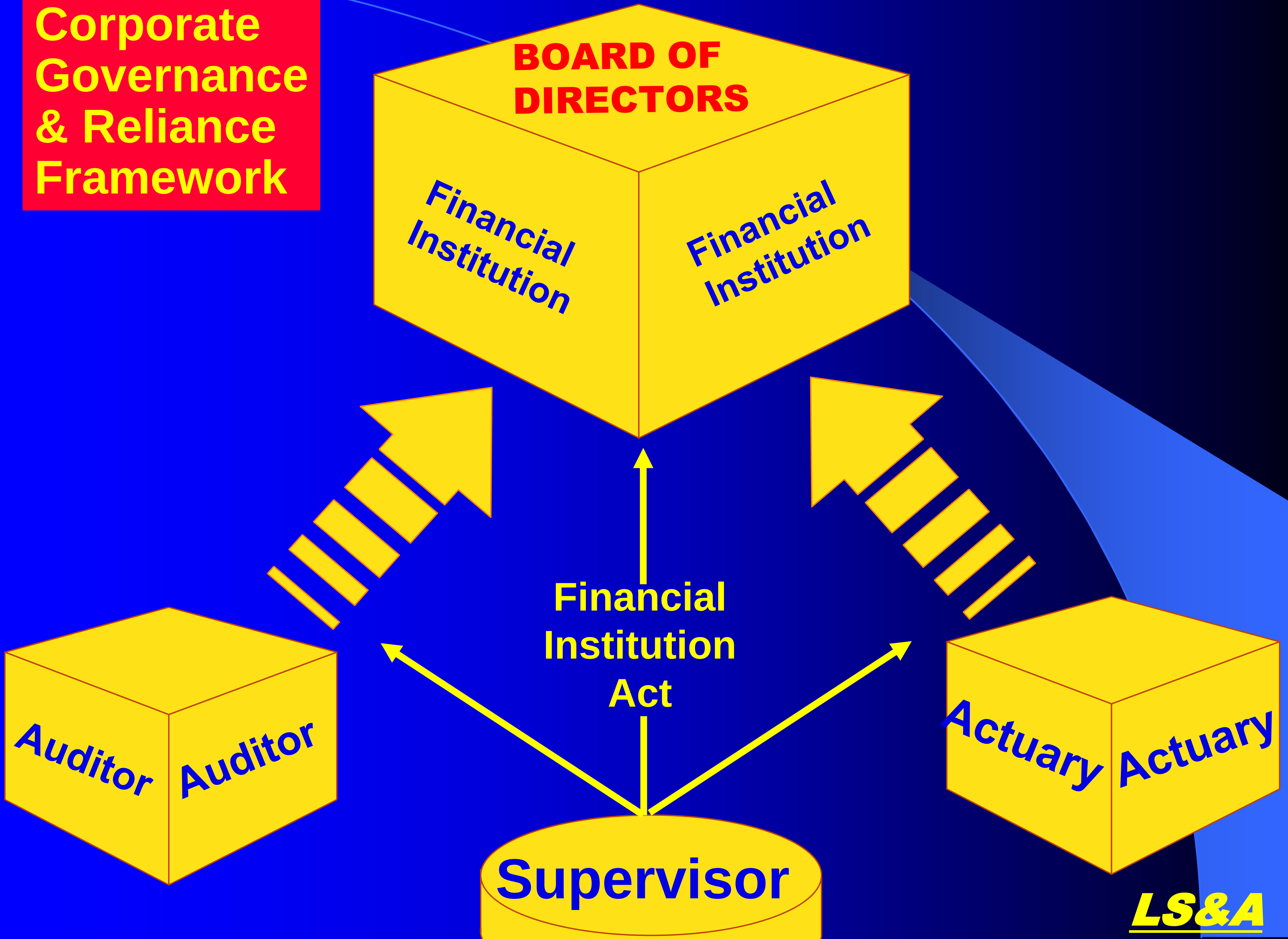
Actuary

Valuation, Risk based capital, Dynamic Capital Adequacy Testing or “stress testing”

SUPERVISORY OVERSIGHT

LS&A

Corporate Governance & Reliance Framework

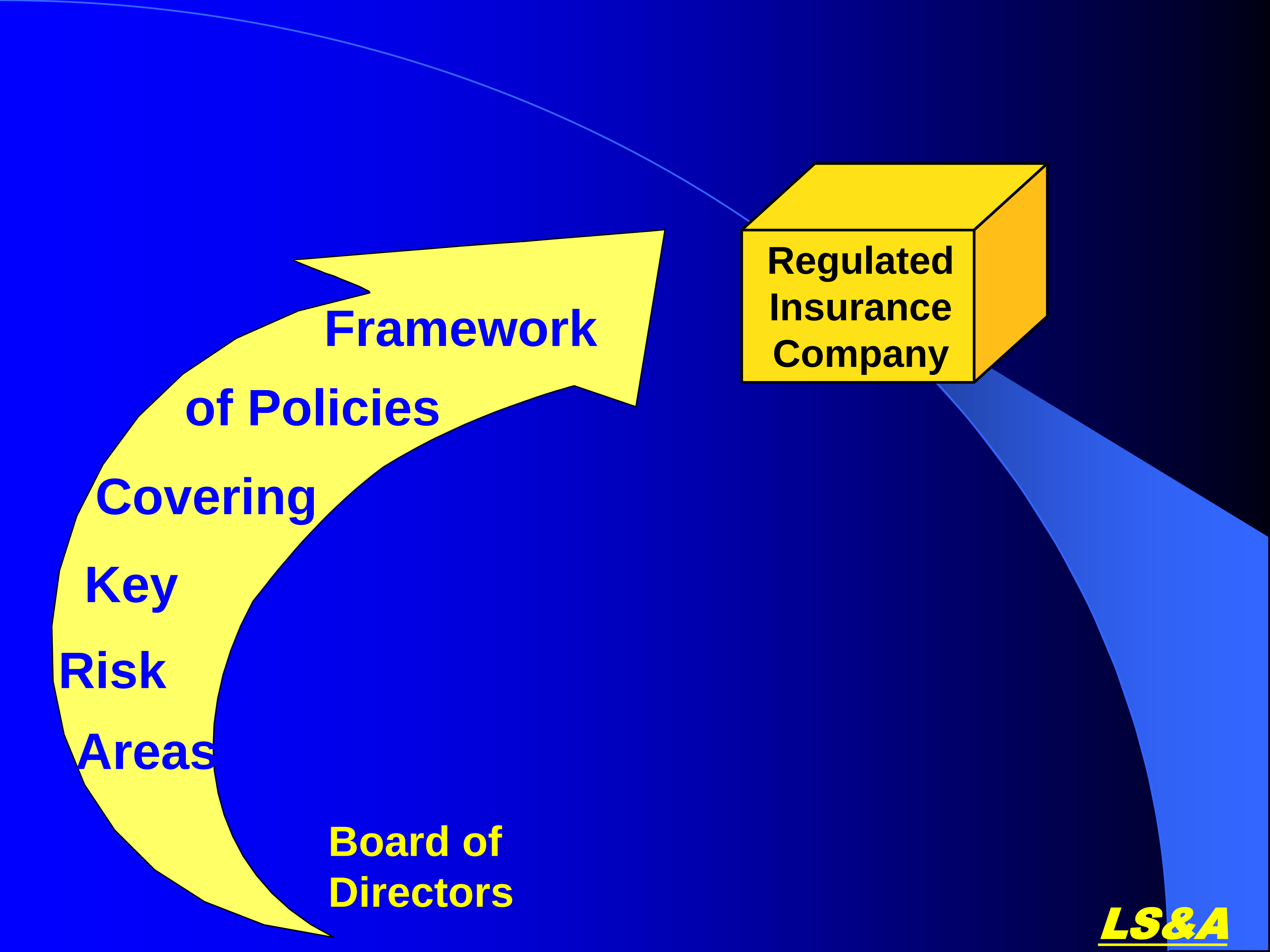


LS&A

Corporate Governance

1. Internal policies and procedures intended to ensure that the company is operated in accordance with **sound business and financial practices**.

LS&A



Regulated
Insurance
Company
Framework
of Policies
Covering
Key
Risk
Areas
Board of
Directors
LS&A

Regulated Insurance Company

Framework of Policies Covering Key Risk Areas

Board of Directors

Main Business Risk Areas

Asset Risk
- **Credit Risk**
- **Market Risk**
- **Liquidity Risk**

Liability Risk
- **Underwriting Risk**
- **Technical Provision Risk**

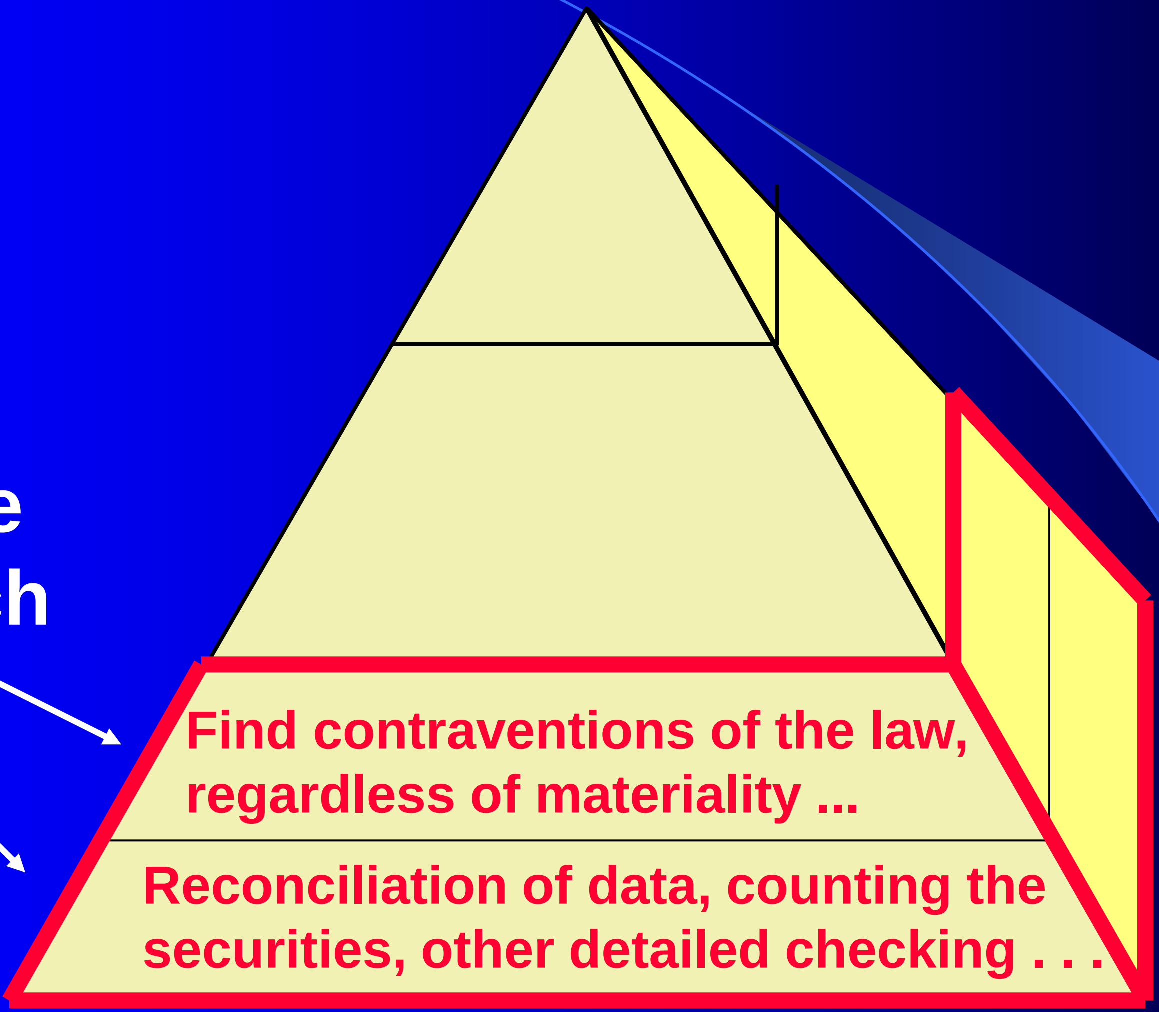
Operational/Technological Risk

Legal / Regulatory Risk

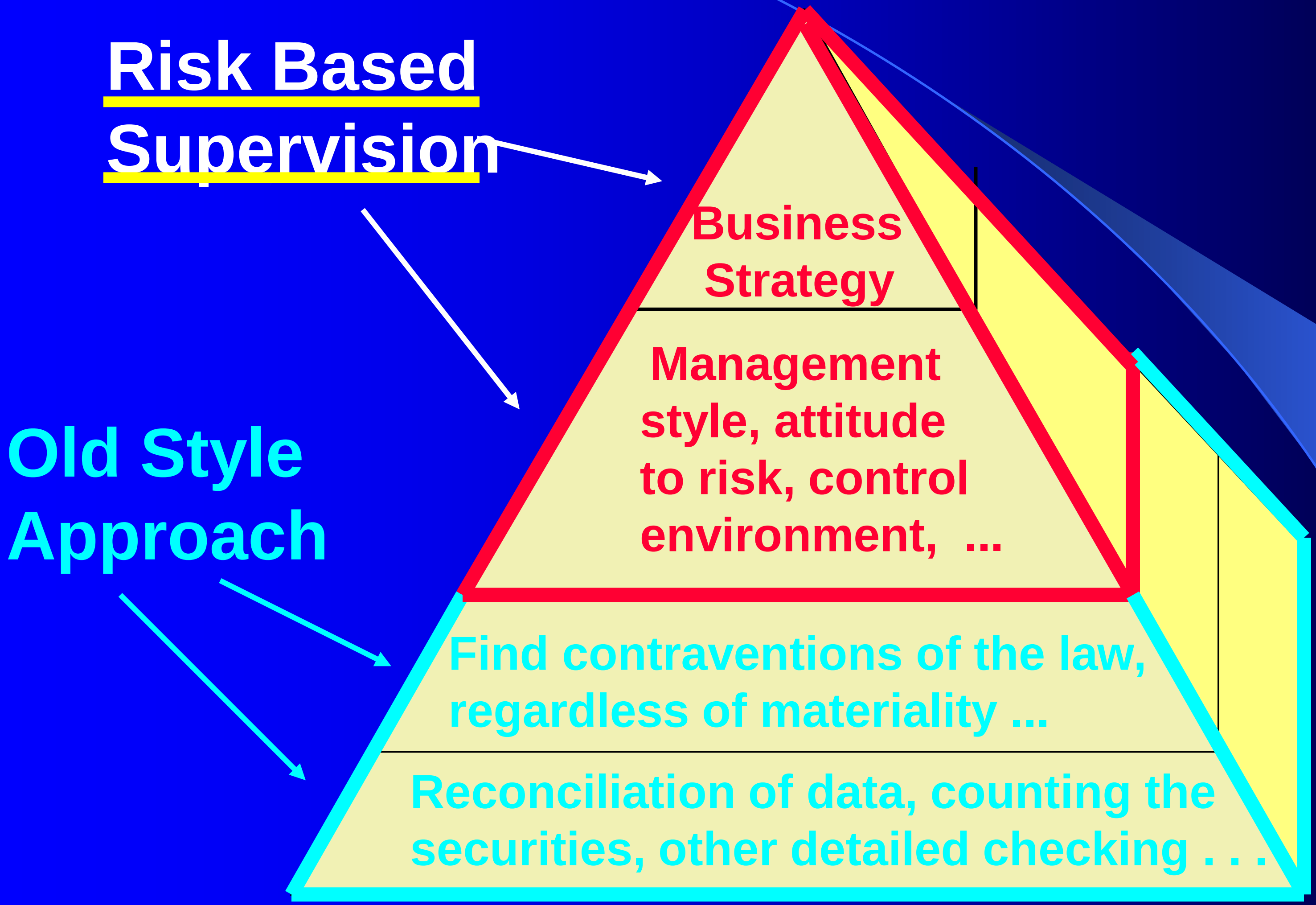
Contagion and Related Party Risk

Evolution of Supervisory Approaches

Old Style Approach



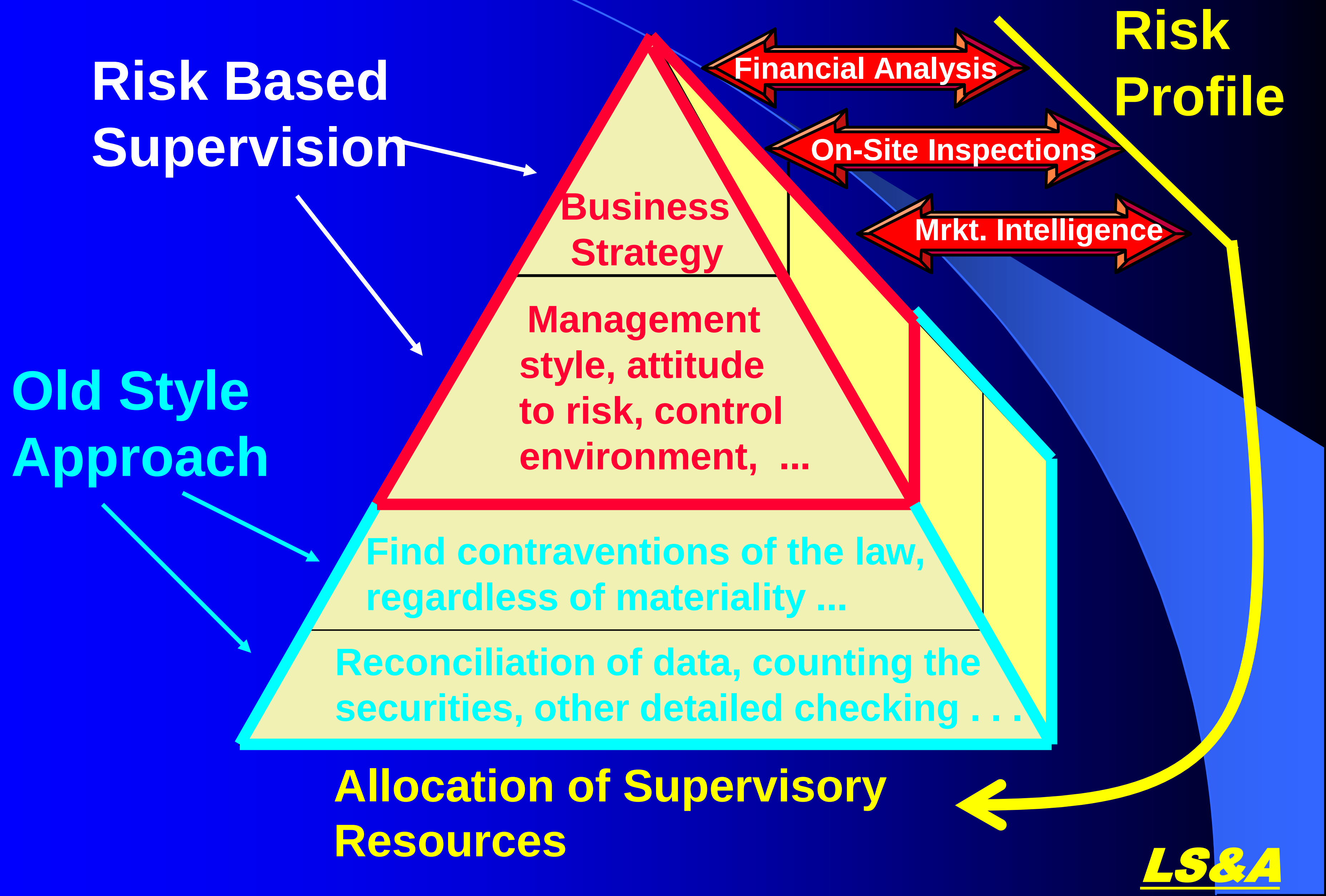
Evolution of Supervisory Approaches



Today we are concerned with assessing the degree of risk in the company's business operations – and how to reduce risk as required

LS&A

Evolution of Supervisory Approaches



Risk Based Supervision

Supervisor

Supervisory attention and intervention based on RISK.

- Early Warning Test Ratios
- Other Financial Analysis
- On-Site Inspections
- Market Intelligence

LS&A

Risk Based Supervision

Supervisor

Supervisory attention and intervention based on RISK.

- **Early Warning Test Ratios**
- **Other Financial Analysis**
- **On-Site Inspections**
- **Market Intelligence**

Risk Assessment

Ladder of Intervention

Risk Based Supervision

Risk Based approach:

- **Identify the higher risk areas.**

LS&A

Risk Based Supervision

Risk Based approach:

- **Identify the higher risk areas.**
- **Prevent problems from developing, rather than merely trying to fix them.**

Risk Based Supervision

Risk Based approach:

- **Identify the higher risk areas.**
- **Prevent problems from developing, rather than merely trying to fix them.**
- **Focus resources where they will do most good, so more efficient, effective.**

Risk Based Supervision

Risk Based approach:

- Identify the higher risk areas.
- Prevent problems from developing, rather than merely trying to fix them.
- Focus resources where they will do most good, so more efficient, effective.
- Can tie in with work of outside auditor, amenable to self-assessment.

LS&A

Corporate Governance and Risk Based Supervision

- **Two sides of the same coin: both are ways of managing and controlling risk.**

LS&A

Corporate Governance and Risk Based Supervision

- Two sides of the same coin: both are ways of managing and controlling risk.
- Corporate governance consists of the internal corporate rules and procedures for managing and controlling risk.

LS&A

Corporate Governance and Risk Based Supervision

- Two sides of the same coin: both are ways of managing and controlling risk.
- Corporate governance consists of the internal corporate rules and procedures for managing and controlling risk.
- Risk based supervision monitors risks and aims to reduce risk where necessary.

Corporate Governance and Risk Based Supervision

- Two sides of the same coin: both are ways of managing and controlling risk.
- Corporate governance consists of the internal corporate rules and procedures for managing and controlling risk.
- Risk based supervision monitors risks and aims to reduce risk where necessary.
- Corporate governance and risk based supervision are mutually reinforcing.

A Modern Insurance Supervisory System

The Insurance Law
Policies and Procedures of the Insurance Supervisory Agency

Direct supervisory activities

LS&A

A Modern Insurance Supervisory System

The Insurance Law
Policies and Procedures of the Insurance Supervisory Agency

Direct supervisory activities

Planning

On Site Inspections

Risk Based
ON-GOING MONITORING AND INFO GATHERING

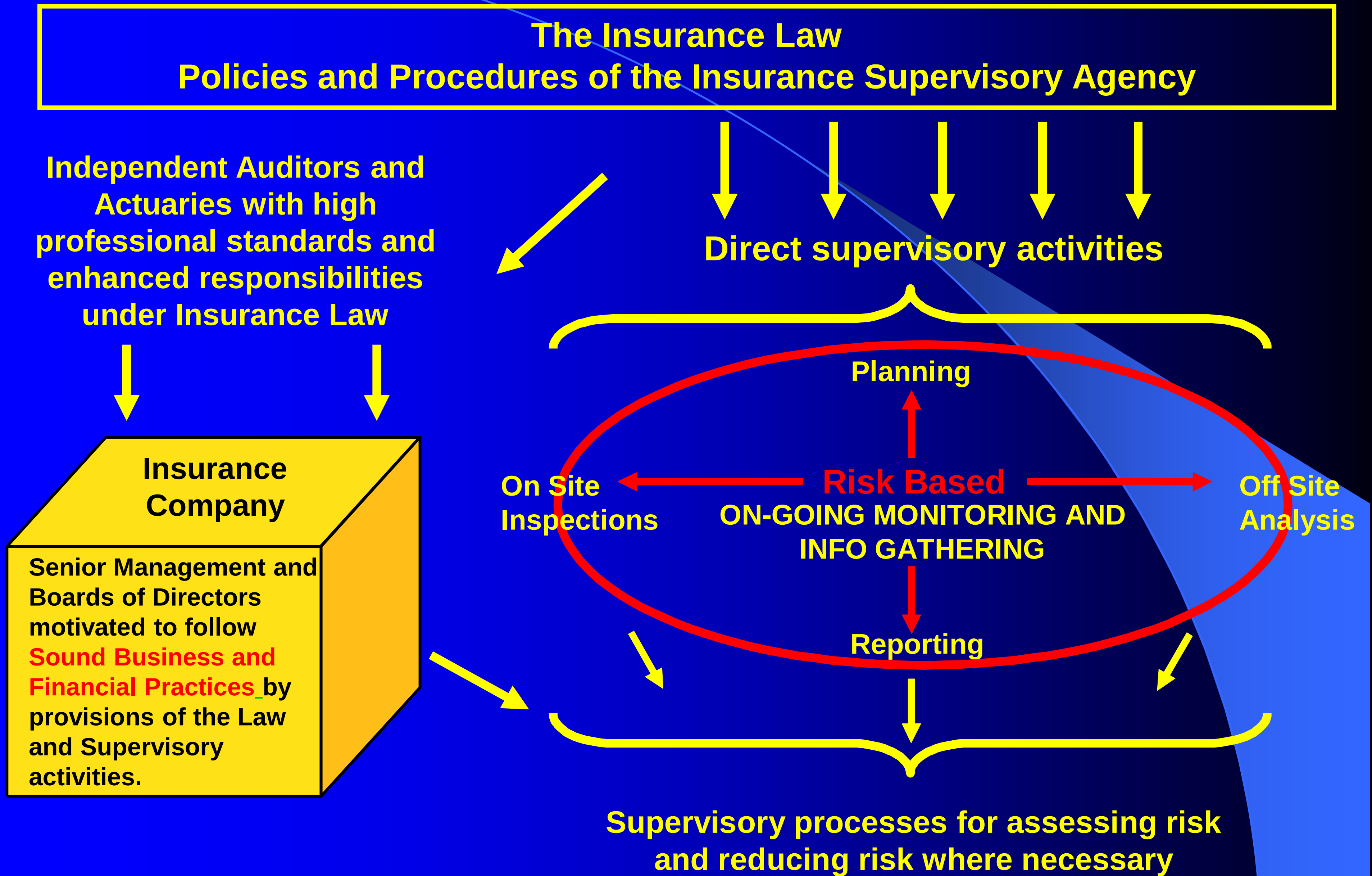
Off Site Analysis

Reporting

Supervisory processes for assessing risk and reducing risk where necessary

LS&A

A Modern Insurance Supervisory System



LS&A

Risk Assessment of Insurers

Lawrie Savage & Associates Inc.

Overview of Risk Assessment Process

We Assess the Various Business Risks

And then we take account of

Quality of Risk Mitigation Processes

Overview of Risk Assessment Process

1. Assess the business risk of the insurer.
   a. This means the risk associated with the various business functions of the company, i.e. technical provisioning, investment risks, credit risks etc.

Asset Risk
- Credit Risk
- Market Risk
- Liquidity Risk

Liability Risk
- Underwriting Risk
- Technical Provision Risk

Operational/Technological Risk

Legal / Regulatory Risk

Contagion and Related Party Risk

Overview of Risk Assessment Process

1. Assess the business risk of the insurer.
   a. This means the risk associated with the various business functions of the company, i.e. technical provisioning, investment risks, credit risks etc.
2. Assess the effectiveness of the company's risk control systems.

Overview of Risk Assessment Process

1. Assess the business risk of the insurer.
    a. This means the risk associated with the various business functions of the company, i.e. technical provisioning, investment risks, credit risks etc.
2. Assess the effectiveness of the company's risk control systems.
3. Take account of the size of the equity base and the quality of earnings.

LS&A

Overview of Risk Assessment Process

1. Assess the business risk of the insurer.
   a. This means the risk associated with the various business functions of the company, i.e. technical provisioning, investment risks, credit risks etc.
2. Assess the effectiveness of the company's risk control systems.
3. Take account of the size of the equity base and the quality of earnings.
4. Come to a final "composite risk assessment"

LS&A

Overview of Risk Assessment Process

In summary, we have:

Business Risk **Balanced By** **Effectiveness of Risk Mitigation =**

<u>NET RISK</u>

NET RISK modified by the strength of the company's capital resources and quality of its earnings =

<u>COMPOSITE RISK RATING</u>

Overview of Risk Assessment Process

The entire process must be:

- **As objective as possible**
- **As consistent as possible**

To achieve these goals we must have a formal, structured framework.

This is the framework that the consultants and SVS have been developing as an important part of the current project.

Assessing Business Risk

- Business risk will be evaluated for each key risk area.
- Companies will be advised of how the assessment was arrived at.
- Similar concept as factors in risk based capital.
- For example: Liability business has greater degree of Underwriting Risk than Property coverage. Common share investments have greater degree of Market Risk than Government bonds. Real estate has greater degree of Liquidity Risk than common shares. Liability claim provisions have higher degree of Technical Provision Risk than Property claim provisions.
- Business risk can also be impacted by policies of board and senior management. For example, if company has limit on common share investments, maximum liability policy that can be underwritten, etc.

Asset Risk
- Credit Risk
- Market Risk
- Liquidity Risk

Liability Risk
- Underwriting Risk
- Technical Provision Risk

Operational/Technological Risk
Legal / Regulatory Risk
Contagion and Related Party Risk

LS&A

Assessing Risk Mitigation

After the supervisor has considered the business risk profile of the insurer, there will be consideration of the effectiveness of risk mitigation, using each of the key risk mitigation areas:

- Corporate Governance
- Internal Control
- Risk Management
- Operational Management

To what extent is business risk being mitigated by good corporate governance procedures? By good internal controls? By good risk management practice? By good operational management?

LS&A

Assessing Net Risk

Net Risk Assessment Chart

	Business risk		
	Low	Moderate	High
Risk Management	NET RISK ASSESSMENT		
Strong	LOW	LOW	MODERATE
Acceptable	LOW	MODERATE	HIGH
Weak	MODERATE	HIGH	HIGH

Assessing Financial Resources

- To this point we have focused on RISK
- Now we focus on the financial resources of the insurer:

We know that even if two insurers have scored at exactly the same level to this point in the process, if one insurer has stronger capitalization and/or a stronger and more reliable stream of earnings, that insurer will be better able to withstand financial shocks in the future.

THE ACTUAL FINANCIAL RESOURCES OF THE INSURER HAVE TO BE GIVEN A STRONG WEIGHTING IN THE ASSESSMENT PROCESS.

Assessing Composite Risk

Composite Risk Assessment Chart

		Capital and Earnings				
		Strong	Satisfactory	Less than Satisfactory	Deficient	Critically Deficient
Net Risk Rating	Low	Low	Satisfactory	Material Emerging	Unacceptable	Extreme
	Moderate	Low	Satisfactory	Unacceptable	Extreme	Extreme
	High	Satisfactory	Material Emerging	Unacceptable	Extreme	Extreme

The suggested Composite Risk Ratings appear in the cells of the matrix for various combinations of Net Risk and Capital/Earnings risk levels.

LS&A

The Ladder of Intervention

As the assessed level of composite risk increases, the strength of SVS intervention also increases.

Level 1 Risk – Low: Routine filings etc.

LS&A

The Ladder of Intervention

As the assessed level of composite risk increases, the strength of SVS intervention also increases.

Level 2 – Satisfactory: Slightly higher profile with SVS.

Level 1 Risk – Low: Routine filings etc.

LS&A

The Ladder of Intervention

As the assessed level of composite risk increases, the strength of SVS intervention also increases.

Level 3 – Material Emerging Risk: Significant attention from SVS, possibly with directions about business.

Level 2 – Satisfactory: Slightly higher profile with SVS.

Level 1 Risk – Low: Routine filings etc.

The Ladder of Intervention

As the assessed level of composite risk increases, the strength of SVS intervention also increases.

Level 4 – Unacceptable: Strong intervention measures from SVS, likely with directions about business. Need for additional capital?

Level 3 – Material Emerging Risk: Significant attention from SVS, possibly with directions about business.

Level 2 – Satisfactory: Slightly higher profile with SVS.

Level 1 Risk – Low: Routine filings etc.

The Ladder of Intervention

As the assessed level of composite risk increases, the strength of SVS intervention also increases.

Level 5 – Extreme: Insolvency imminent
Level 4 – Unacceptable: Strong intervention measures from SVS, likely with directions about business. Need for additional capital?
Level 3 – Material Emerging Risk: Significant attention from SVS, possibly with directions about business.
Level 2 – Satisfactory: Slightly higher profile with SVS.
Level 1 Risk – Low: Routine filings etc.

The Critical Factors for Insurers

Various Business Risks

offset by

Quality of Risk Mitigation Processes

Asset Risk
- Credit Risk
- Market Risk
- Liquidity Risk

Liability Risk
- Underwriting Risk
- Technical Provision Risk

Operational/Technological Risk
Legal / Regulatory Risk
Contagion and Related Party Risk

Corporate Governance

Internal Control

Risk Management

Operational Management

LS&A

The Critical Factors for Insurers

Various Business Risks

offset by

Quality of Risk Mitigation Processes

=

Net Risk

Asset Risk
- **Credit Risk**
- **Market Risk**
- **Liquidity Risk**

Liability Risk
- **Underwriting Risk**
- **Technical Provision Risk**

Operational/Technological Risk
Legal / Regulatory Risk
Contagion and Related Party Risk

Corporate Governance

Internal Control

Risk Management

Operational Management

The Critical Factors for Insurers

Various Business Risks

offset by

Quality of Risk Mitigation Processes

=

Net Risk

Asset Risk
- Credit Risk
- Market Risk
- Liquidity Risk

Liability Risk
- Underwriting Risk
- Technical Provision Risk

Operational/Technological Risk
Legal / Regulatory Risk
Contagion and Related Party Risk

Corporate Governance

Internal Control

Risk Management

Operational Management

Assessment of Capital and Earnings Resources

Composite Risk Assessment

LS&A


THE ONE RISK WE DIDN'T ALLOW FOR WAS OVERSPENDING SO HEAVILY ON RISK MANAGEMENT THAT WE WENT BUST

LS&A

End of Presentation