



Risk Management in Italy: State of the art and perspectives

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- » **What is Risk**
- » **Some misleading issues about Risk**
- » **Corporate Risks: a Taxonomy**
- » **What is Risk Management**
- » **Risk Management Trend and Main Development Factors**
- » **Towards Enterprise Risk Management (ERM) Approach**
- » **Risk Management Strategies**
- » **Project Risk Management**
- » **Risk Management Benefits and Obstacles**
- » **Risk Management Process**
- » **Some Empirical Analysis**



“Risks are uncertain future events which could influence the achievement of the organization’s objectives, including strategies, operational, financial and compliance objectives”

Risk concerns the expected value of one or more results of one or more future events. Technically, the value of those results may be positive or negative. It refers to the **distribution of the company’s expected results**, due to **exogenous** and **endogenous** factors

What kind of **factors** are we referring to ?

- **new unexpected conditions in the financial markets and/or in the goods and services markets**
- **shocks through the operations of the company**



There are some issues about the risk that sometimes can be misleading:

- **The risk is usually negative: we usually tend to focus only on potential harm that may arise from a future event ('downside risk')**

- **Some risks are so negative to be avoided: their economic impacts are so huge**

- **Risk avoidance is always a successful strategy**



“Managers are not paid to take risks but to
know which risks they take
.... And transform them in business opportunities”

“Manage the risk...or the risk will manage you...”



Strategic Risk

(Credit, concentration,
reputation, ...)

Financial Risk

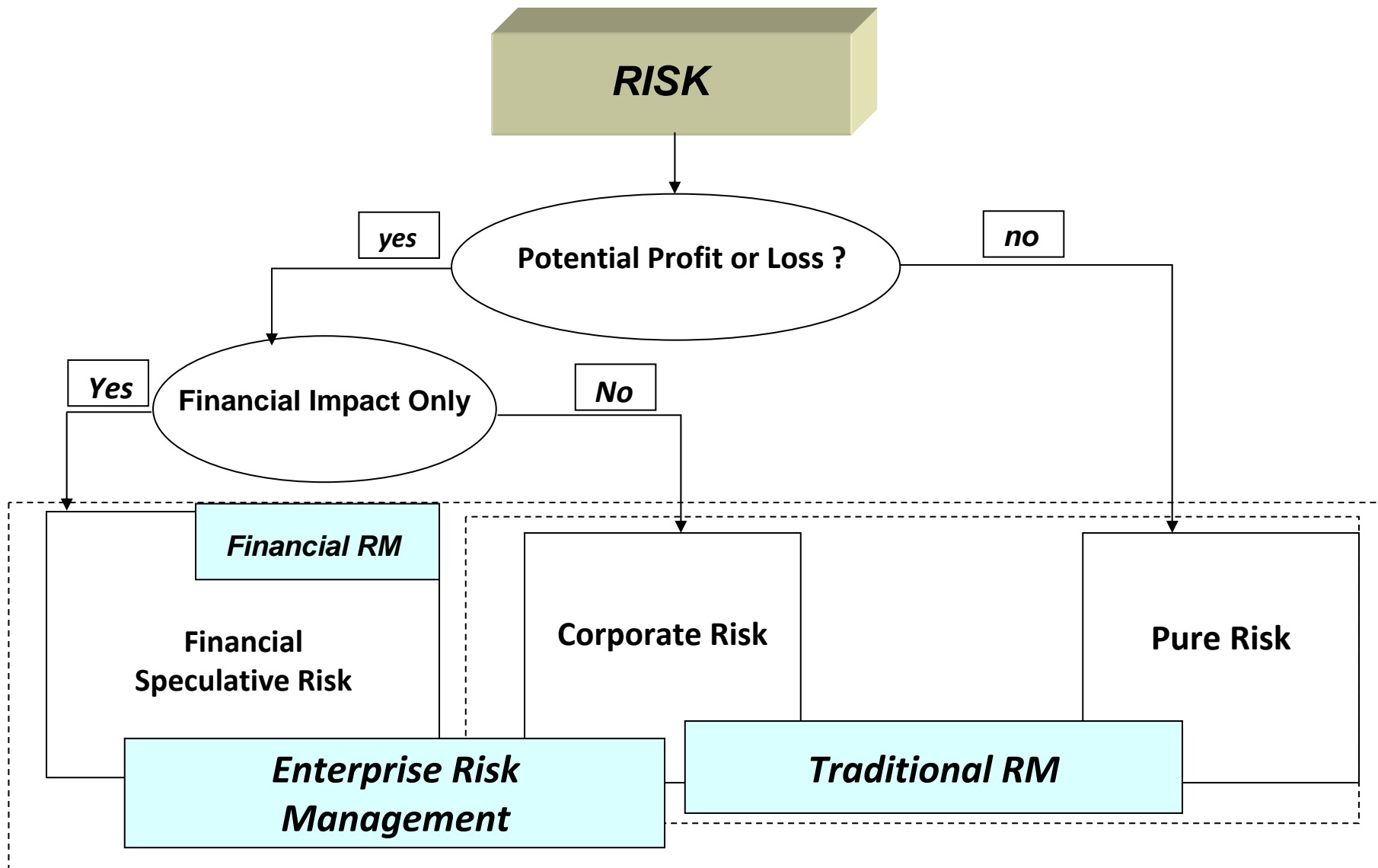
(Interest rate, liquidity,
market, commodities, cost of
capital, covenant violation, ...)

Operational Risk

(processes, IT,
human resources,
product defects increase, ...)

Compliance Risk

(legal, regulatory, antitrust, ...)





Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events

Risk management:

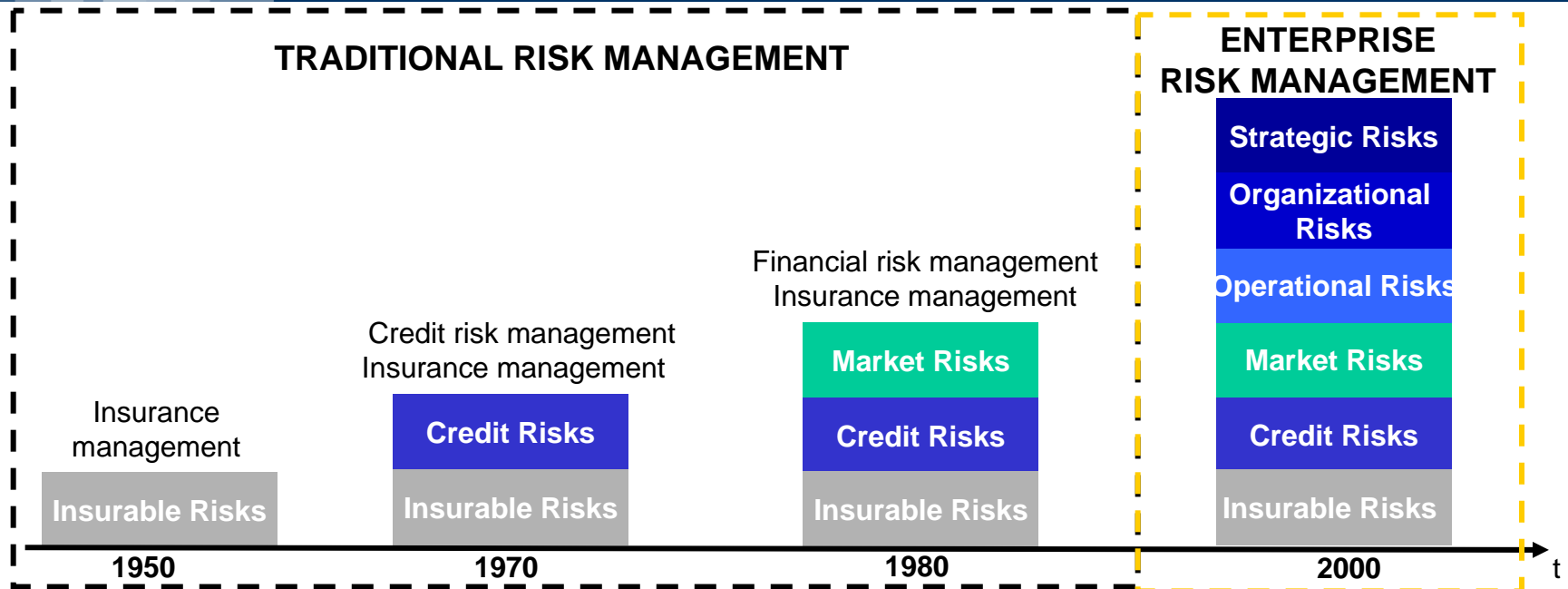
1. Identify, characterize, and assess threats
2. assess the vulnerability of critical assets to specific threats
3. determine the risk (i.e. the expected consequences of specific types of attacks on specific assets)
4. identify ways to reduce those risks
5. prioritize risk reduction measures based on a strategy



Principles of Risk management:

1. Risk management should create value
2. Risk management should be an integral part of organizational processes
3. Risk management should be part of decision making (strategic planning)
4. Risk management should explicitly address uncertainty
5. Risk management should be systematic and structured
6. Risk management should be based on the best available information
7. Risk management should be tailored
8. Risk management should take into account human factors
9. Risk management should be transparent and inclusive
10. Risk management should be dynamic, iterative and responsive to change
11. Risk management should be capable of continual improvement and enhancement

Source: International Organization for Standardization



Felix Kloman, 2003, Enterprise Risk Management: Past, Present and Future

Traditional Risk Management	Enterprise Risk Management
<p>Not so Strategic Functional Responsive Discontinuous <i>Cost Based</i></p>	<p>Strategic Cross-sectional Proactive Continuous, Frequent <i>Value Based</i></p>

De Loach, 2000, Enterprise-Wide Risk Management: Strategies for linking risk and opportunity



Main Factors can explain the increasing level of importance of the Risk Management

- Globalization
- Market Volatility
- Technology
- Higher level of complexity (i.e. financial products)
- New virtual distribution channel
- Deregulation and regulatory change



Authorities pressures:

- Economic and financial stability
- Capital Adequacy
- Corporate Risk Management
- Transparency and Market Discipline
- Risk-sensitive constraints



Financial Markets Turmoil:

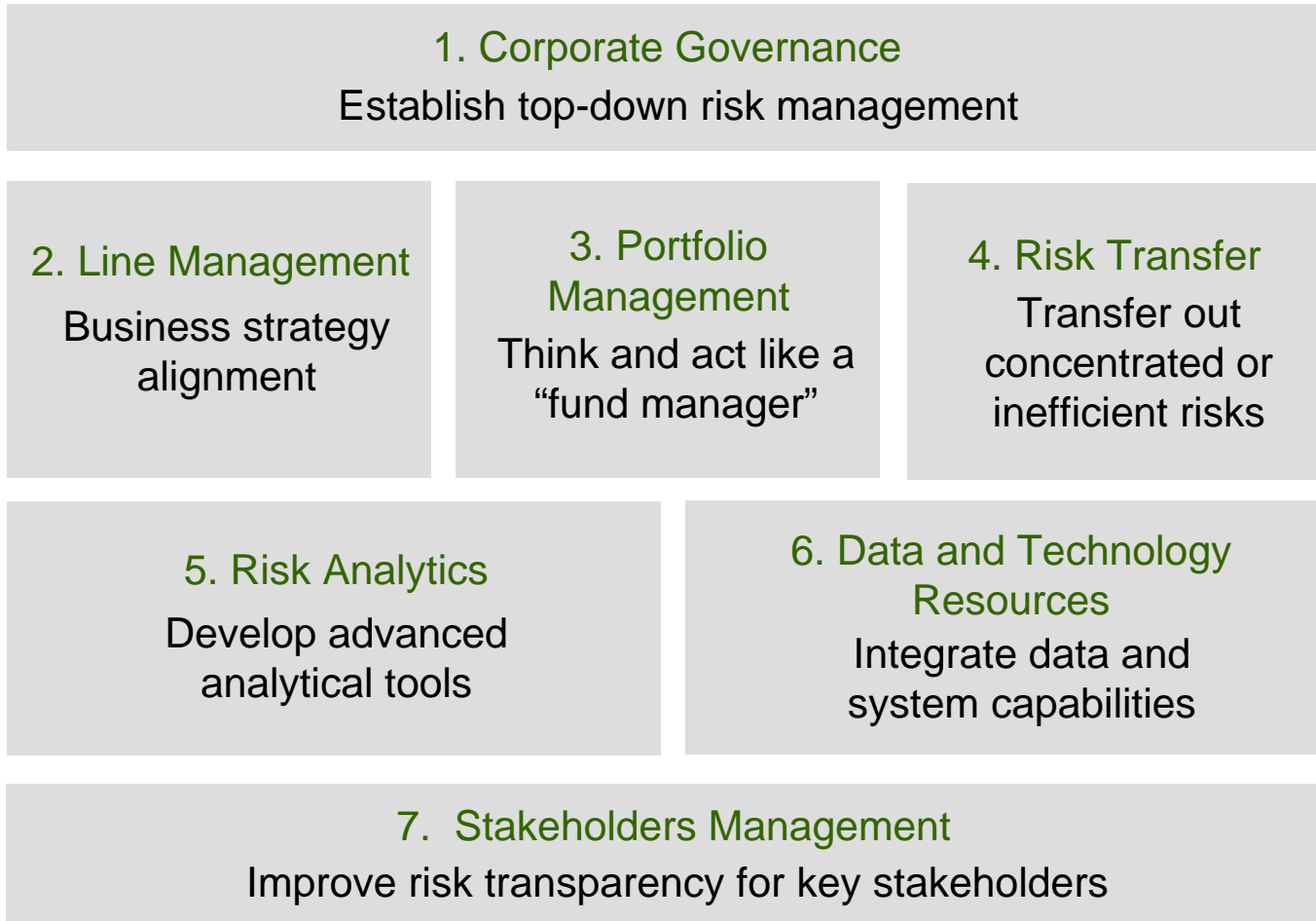
- Many off balance new vehicles, with a very wide perimeter
- No leverage limitations
- 'AAA' CDS issues, with no capital absorption
- Risk management systems so far from the business, not able to go in deep (low transparency, ...)
- Authorities not able to control the real risk exposure

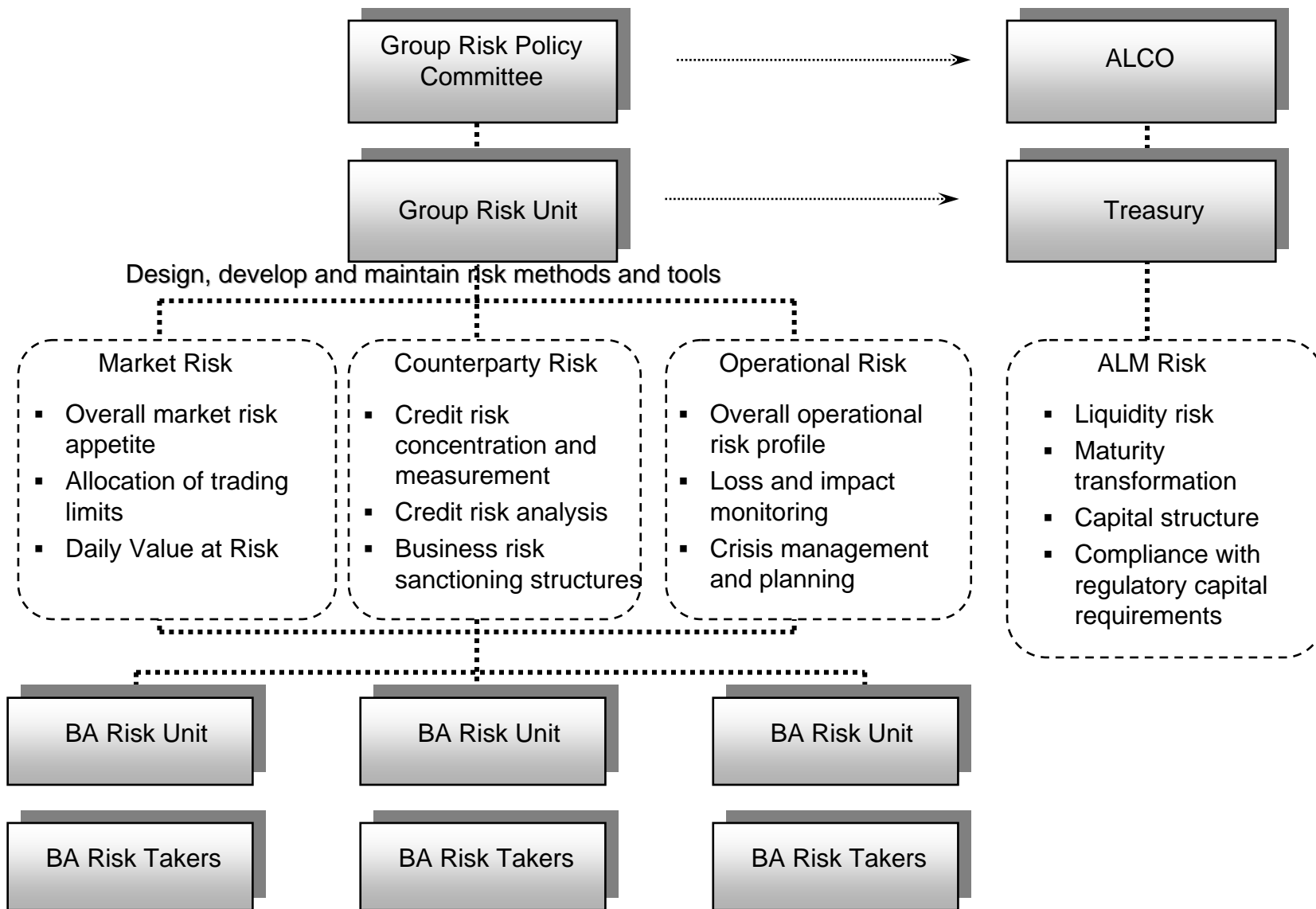


Towards ERM: “Watertight Compartment” Risk Management¹⁴

	Credit Risk	Market Risk	A/LM Risk	Operational Risk
Who	<ul style="list-style-type: none">• Chief Credit Officer	<ul style="list-style-type: none">• CFO• Business Managers	<ul style="list-style-type: none">• Treasurer• Asset/Liability Manager	<ul style="list-style-type: none">• Internal Audit• Corporate Actuarial
How	<ul style="list-style-type: none">• Exposure Limits• Portfolio Measurement• Securitization/ Derivatives	<ul style="list-style-type: none">• Investment Limits• Portfolio Return• Growth Limits	<ul style="list-style-type: none">• Trading and A/LM Limits• Value at Risk Management• Financial Derivatives	<ul style="list-style-type: none">• Controls• Audit Review• Insurance



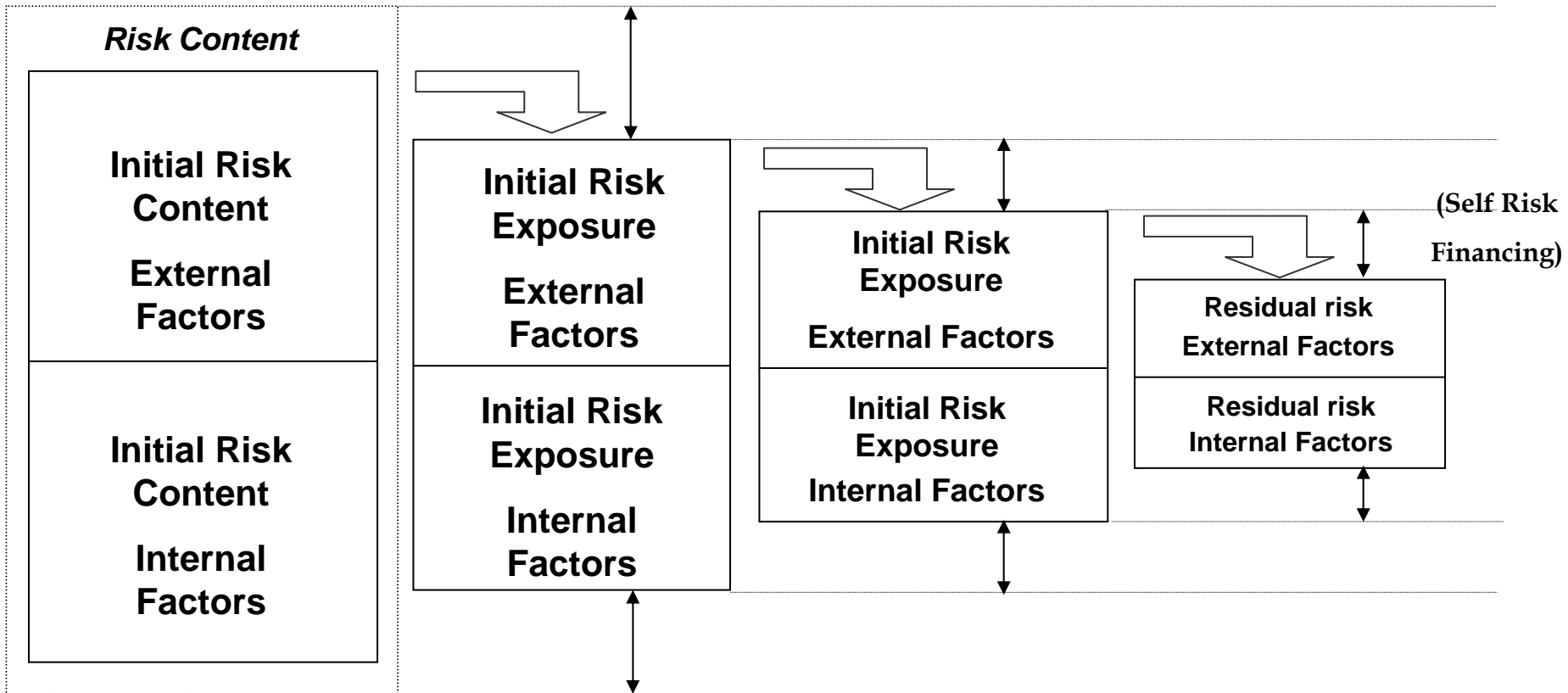
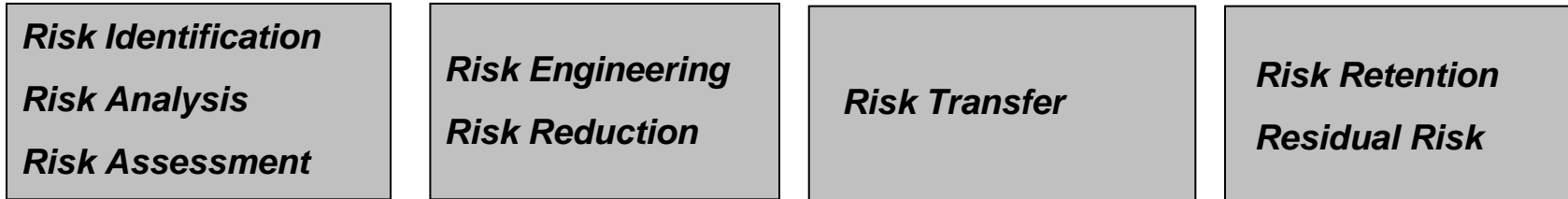






The risk propensity will have an impact on the risk management strategies to implement:

- 1.Avoidance** (eliminate)
- 2.Reduction** (mitigate)
- 3.Transfer** (outsource or insure)
- 4.Retention** (accept and budget)
- 5.Sharing**





Risk Identification
Risk Analysis
Risk Assessment

Risk Engineering
Risk Reduction

Risk Transfer

Risk Retention
Residual Risk

Objectives:

- ✓ Risk Identification and Correlation Analysis
- ✓ Risk Magnitude
- ✓ Priorities Definition

Tools:

- ✓ Quantitative Analysis
- ✓ Regulation
- ✓
- ✓

Objectives:

- ✓ Risk Tolerance Definition
- ✓ Risk Reduction and Severity (*Risk Matrix & Risk Profiling*)
- ✓ Risk Monitoring

Tools:

- ✓ Physical Protection
- ✓ Organizational Protection
- ✓ Financial Coverage
- ✓

Objectives:

- ✓ External Transfer of Risks not Efficient to be Managed Internally
- ✓ Insurance Management

Tools:

- ✓ Insurance Companies
- ✓ Formal Agreements
- ✓

Objectives:

- ✓ Pure Risk Retention
- ✓ *Self Risk Financing*
- ✓ Monitoring
- ✓ Risk Review

Tools:

- ✓ Captive Companies
- ✓ Allowances
- ✓



In Project Management, risk management may include the following activities:

- 1.Planning how risk will be managed in the particular project. Plan should include risk management tasks, responsibilities, activities and budget;
- 2.Assigning a risk officer - a team member other than a project manager who is responsible for foreseeing potential project problems. Typical characteristic of risk officer is a healthy skepticism;
- 3.Maintaining live project risk database. Each risk should have the following attributes: opening date, title, short description, probability and importance. Optionally a risk may have an assigned person responsible for its resolution and a date by which the risk must be resolved;
- 4.Creating anonymous risk reporting channel. Each team member should have possibility to report risk that he/she foresees in the project;
- 5.Preparing mitigation plans for risks that are chosen to be mitigated. The purpose of the mitigation plan is to describe how this particular risk will be handled – what, when, by who and how will it be done to avoid it or minimize consequences if it becomes a liability;
- 6.Summarizing planned and faced risks, effectiveness of mitigation activities, and effort spent for the risk management



Benefits

- **Assessment and Cross Management of Threats and Opportunities**
- **Focus Investments upon Risks with the Higher Priorities**
- **Risk Management Costs Optimization**
- **Cash Flow Volatility Reduction**
- **Lowering the Cost of Capital**
- **Business Processes Optimization**
- **Management Control System Improvement**
- **Compliance Improvement**

Obstacles

- **Lack of Suitable Culture and Competences**
- **High Implementation and management costs perception compared with expected benefits**
- **Difficulty to identify, consolidate and manage risks through a cross functional approach**



Risk Manager Tasks:

1. Risk management plan
2. Management advisory in order to assess and to manage risks
3. Risk information consolidation
4. Coverage tools picking
5. Risk reporting
6. Connections with all the critical areas of the company (i.e. legal office, ...)
7. Risk cultural objectives



- a) Survey
- b) Statistical Analysis



Sample definition criteria

- Sectorial diversification
- Size diversification
- MNE Italian branches



ERM Implementation Evaluation

Companies investigated

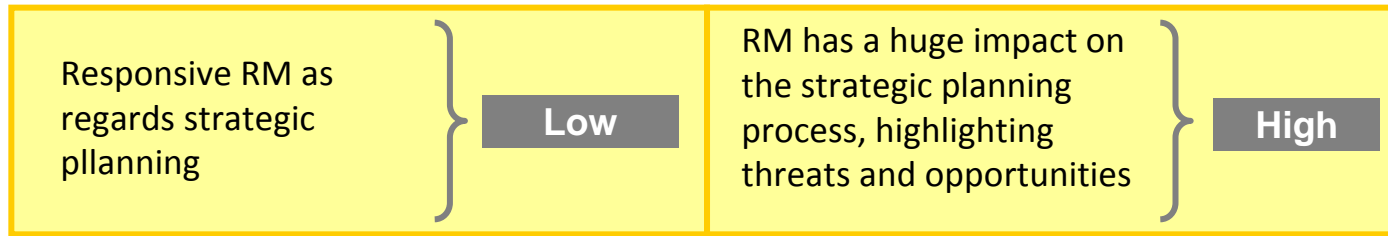
- Revenues range between 1 € bn and 75 € bn
- Employees range between 1.000 and 430.000 units

Areas of Investigation

- **STRATEGY**
 - Connections between RM and strategy
 - Risk assessment and reporting frequency
 - Integration level
- **ORGANIZATION**
 - Human resources involved
- **OPERATIONS**
 - Framework
 - Risk assessment tools



- **Connection between strategy and RM: Different levels of intensiveness**



- **Formal Risk assessment with different levels of frequency, as a function of the size, of the number of involved actors, of the standardization level of the ERM process**



- **More frequent informal Risk assessment**
- **Each risk assessment activity has an internal reporting (top management and business areas involved) and an external reporting (stakeholders)**
- **Risk information consolidation in order to define how to assess the management of the different areas of risks**
- **Tendency to centralize financial risks and insurable risks**
- **The wider the size the higher the number of risks that are managed centrally**



Distinctive factors

- Each company has its own organizational shape



- The higher the size and the level of complexity of the business, the more complex and organized the RM structures

Common issues

- High level of commitment and strong presence of the top managers
- First and second line involvement, helpful for the risk assessment activity
- Effort to spread the culture of risk through the organization



Sample definition criteria

- 1.500 companies
- Manufacturing and Services
- Mid companies



**Risk Exposure, Risk Percpetion,
Systems of Risk Management**

Companies investigated

- Response Rate \cong 15%
- Revenues range between 50 € mln and 250 € mln

Areas of Investigation

- **Risk Exposure**
 - Main risk areas in terms of importance
- **Risk Percpetion**
 - Culture
- **Risk Management**
 - Objectives
 - Frequency
 - Tools



Some preliminary results:

1. Main Risk Areas: 'top 4' \Rightarrow credit, technology, legal, commodities
2. Frequency: most of the risk (> 50%) are checked annually or when it's necessary, except for the business risk (> 40% monthly)
3. Objectives: 'top 3' \Rightarrow competitive advantage sustainability, coverage reduction, cost of capital decreasing)
4. HR: no specific competences ! Usually RM activities within financial management or operations management
5. Processes: not yet standardized processes supporting Risk Management
6. Tools: more developed in the Financial Risk Management area



- **Risk management strategy and implementation strongly related to the business**
- **ERM is a tool for the business management**
- **ERM is not only an answer to environmental and regulatory factors**
- **ERM must support a more efficient and controlled daily management activity**
- **Consolidation of the risk factors through a centralized view (ERM) still continues to be the challenge**