

Why Reinsurance ? The Financial Point of View.

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Reinsurance

- **Reinsurance is insurance for insurers.**

Why Insurance ?

- **First : the case of individuals.**
- **Individuals are risk averse.**
- **Their wealth is concentrated : one house, one job.**
- **They cannot diversify their risk.**
- **They will use pooling of risks in order to share their risks.**

The Case of Individuals

- **They are ready to pay insurance premiums.**
- **Because they are risk averse, they are ready to pay premiums higher than expected cost.**
- **They demand insurers to be financially very strong. They certainly do not want to exchange their original risk for a default risk.**

The Case of Individuals

- **Diversifying this default risk clearly is too expensive.**
- **Therefore insurers hold large amounts of capital.**
- **This capital is a buffer against large deviations of claims.**
- **Importance of rating agencies, of control offices.**

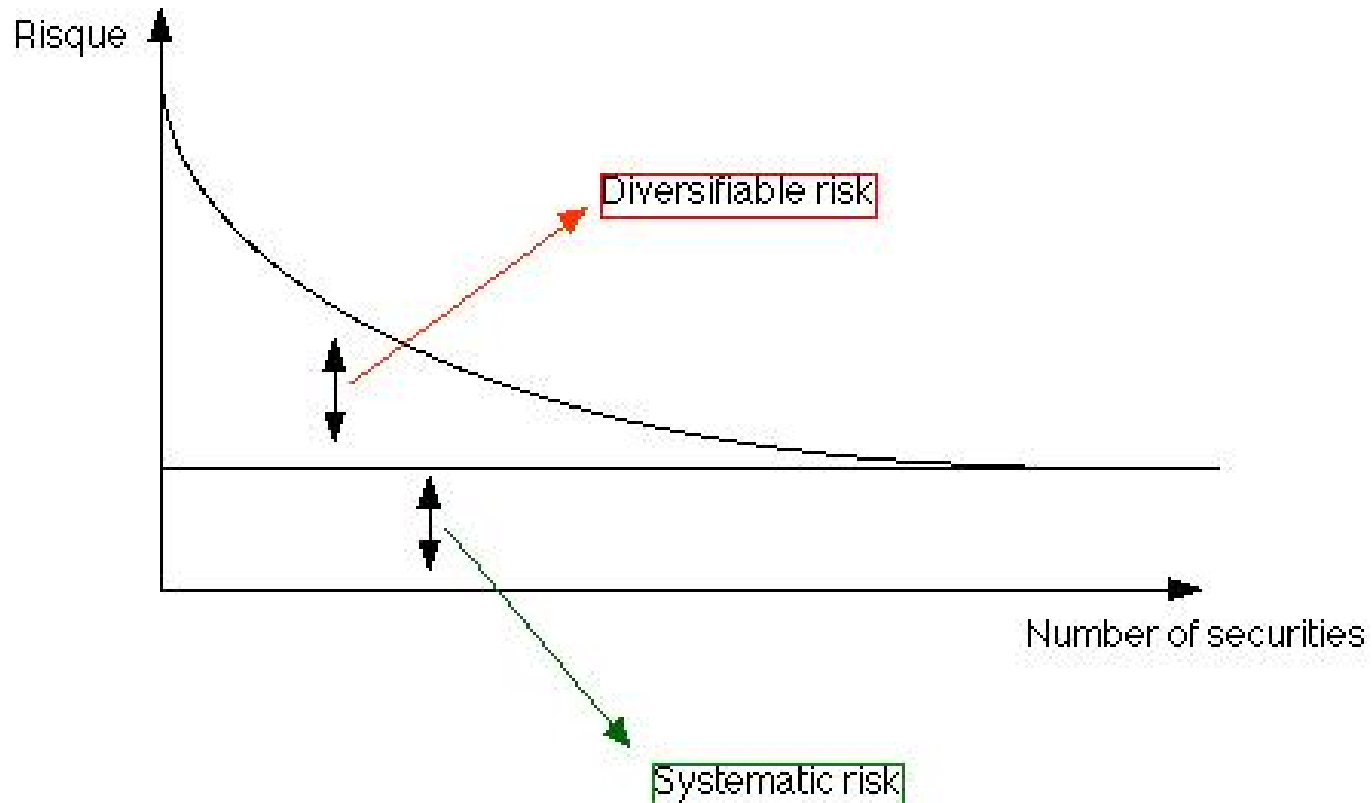
Why Insurance ?

- **Second : we move on to the case of companies.**
- **Commercial companies do buy insurance : theft, natural disasters, liability, fire, ...**
- **Is this rational in the eyes of the company's shareholders ?**
- **We will assume that shareholders are playing on the world market (financial holdings).**

The Case of Companies

- **Let us apply the CAPM : capital asset pricing model.**
- **By holding sufficient stocks, shareholders eliminate diversifiable risk.**
- **Only systematic risk remains and is rewarded by the cost of capital.**

Diversifiable / Non-diversifiable Risk



An Example

- **Assume first a large car rental agency.**
- **They do not buy insurance against the risk of collision because they apply diversification on their large fleet of cars themselves.**
- **Assume now the case of a commercial company with a number of company cars.**
- **Should they buy insurance against the risk of collision ?**

An Example

- **The answer is yes as we believe that the management is not able to diversify the risk.**
- **However, the answer is NO as shareholders of that company have diversified their insurable risks. So they do not want to pay premiums that are larger than the expected cost : this is destroying their value !**

Why Insurance ?

- **However, we know that companies do buy insurance.**
- **We have seen that this is not optimal for the shareholders.**
- **Other people are involved**
 - employees, managers
 - clients
 - suppliers

Why Buying Insurance ?

- **The cost of the insurance is amply covered by the reduction in the employee's (e.g.) extra compensation required for otherwise bearing risks themselves. It is a transfer of risk from employees to the insurer (paid by the shareholders).**

Summary

- **Individuals buy insurance because they are risk averse.**
- **Companies buy insurance because their employees, clients, suppliers are risk averse.**
- **Companies do not buy insurance in order to protect shareholders' funds.**

The Case of Medium-Sized Companies

- **The solution can be found somewhere between the case of individuals and companies held by well diversified shareholders.**

The Case of Insurance Companies

- **Insurers need some buffer capital in order to show their financial strength.**
- **Reinsurance is an alternative to holding large amounts of capital.**
- **The aim of reinsurance is not to protect shareholders' capital. From their point of view they do not want to pay for reinsurance.**