

## **Morale hazard**

The term *morale hazard* can be found in both insurance and microeconomics. Morale hazard describes the tendency of insurance to reduce incentives to prevent loss. One can observe, that an individual's incentive to prevent loss is reduced when insurance is present to cover the loss. Consequently, morale hazard is defined as potential costs of insurance in which the presence of insurance increases the trend for losses to occur through careless, irresponsible, or of perhaps illegal behavior. *Morale* hazard is a term sometimes used to distinguish between careless (morale) and illegal (moral) behavior. In this connection and more generally, the term *hazard* means a condition that increases the likelihood of loss or loss amount. Morale hazard can also be differentiated between *ex ante* and *ex post*. This means the policyholder can reduce the (financial) impacts of an insured event beforehand the insured event happened or afterwards.

A simple example would be a car owner who drives more slowly, or with more care (morale hazard) if he is not insured against potential damages caused by accidents compared with the car owner who is insured against damages at his car. A more extreme example (moral hazard) would be if an individual sets fire to collect insurance proceeds.

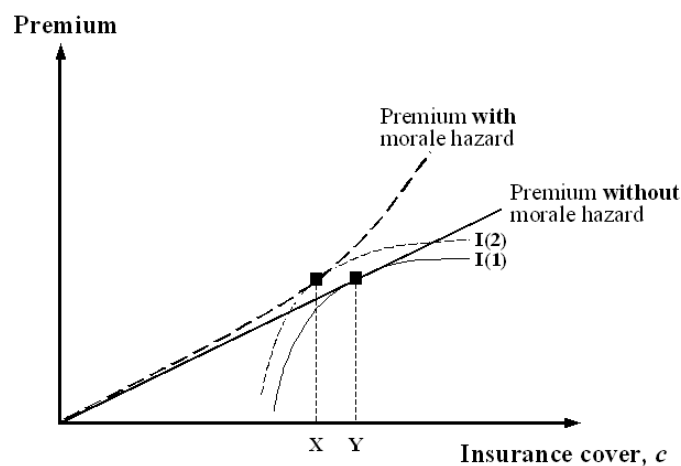
In both cases, the possibility of morale hazard arises since the insured typically has a degree of control over the probability that an insured event will occur, or the size of the loss if it does arise. The insured who suffers a fire can often minimize the loss by removing and protecting undamaged goods. This actions, or inactions of the insured, are chosen as the *level of care*.

According to *Borch (1990)*, the element *morale hazard* can make a risk *uninsurable*. It may be possible for the insurer to check and ensure the policyholder really takes proper care to prevent insurance cases. To observe that obligations are taken into consideration is costly, and the costs must be born by the insured. The insurance agreement may become not acceptable due to exorbitant prices to the potential buyer, and consequently the risk will become uninsurable.

According to *Doherty (2000)*, in microeconomics, the focus is on asymmetric information, incentives, and rational behavior:

The expected loss is not fixed. Rather, the expected loss can be predicted to become more severe as a result of the insurance cover. The problem of morale hazard arises if the level of care is hidden to the insurer; the policyholder may be induced to choose a lower level of care once the insurance is in place. As consequence, the insured will reduce his chosen level of care and the insurer considers this by anticipating the policyholder and takes this into account in the price. Thus, morale hazard describes a behavioral characteristic of the insured and is reflected in underwriting decisions.

As noted above, insurance causes incidents to take care or to invest in safety. The expected loss is in most cases not exactly predetermined. Up to a certain extent, the probable loss can be expected to increase as consequence of insurance protection. It would be a calculable problem to the insurer if the behavior of the policyholder could be observed perfectly. If the level of care or behavior is concealed to the insurer, the insurer needs to take precautions against this unknown risk. It would be reflected in conditions, exclusions, a higher premium, or limited cover. This should be demonstrated on the following diagram:



The graph shows a price schedule and the effects of morale hazard on the premium. The vertical axis determines the premium, on the horizontal axis one can see the portion of cover. Assume the expected loss is independent from the

degree of cover, which means there is no morale hazard. In case the insured can choose a part  $c$  of the loss to insure, one can see that the premium runs proportional to  $c$ ; shown in indifference curve  $I(1)$ . Cover is desirable for the insured (horizontal axis), and the premium is unwanted (vertical axis). Hence, the policyholder's utility given a fixed premium will be higher the farther the point is to the right;  $I(1)$  has higher utility for the insured compared to  $I(2)$ . The corresponding cover is shown as point Y in the diagram.

A situation with moral hazards is shown on the upwards bent line. The more cover is purchased from the insured, the more declines the level of safety. From this follows a higher premium for the same level of insurance in the case with moral hazard. With the increased cost, the original level of utility,  $I(1)$ , is no longer possible. The highest utility with less safety of insurance that can be realized by the policyholder is shown by indifference curve  $I(2)$ . An interesting Discussion on economics and morale hazard is given by *Winter (1992)*.

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### **Further Reading**

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**See also:** ADVERSE SELECTION, ASYMMETRIC INFORMATION, PRINCIPAL-AGENT, INSURANCE, INSURANCE PROCESS, INSURANCE RISK, UNDERWRITING INSURANCE RISK, RISK MANAGEMENT, RISK AWARENESS AND IDENTIFICATION, RISK PREFERENCE, RISK ARBITRAGE