Liability of Insurance Intermediaries: A Law and Economic Approach

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1 Introduction

In 1994 the supply of insurance products increased due to the creation of a Single Market for insurances throughout the European Union. As part of the harmonization of the internal market structures a deregulation process set in that abolished the preventive control of the general insurance conditions by the German regulation authorities. Even though the deregulation stimulated the competition in the field of insurances, the consumer protection suffered losses (Hofer, 2008, p.93) because the products themselves became more heterogeneous (Ihle, 2006, p.52). In order to re-strengthen the consumer protection, the European Union adopted directive 2002/92/EG[1]. Germany implemented the directive in 2006 and changed the existing legislation concerning insurance companies and insurance intermediaries, accordingly.

Insurances are considered to be complex experience and credence goods (Wein, 2001, p.69). Therefore, consumers tend to have difficulties in making informed buying decisions, especially with regard to matching their needs and preferences with the characteristics of different products. As a result, consumers often rely upon the knowledge and the advice of an expert which might explain that insurance products are predominantly sold by insurance intermediaries. But, as an uninformed consumer relies upon an informed expert, an agency-problem arises. Pratt and Zeckhauser (1985, p.2) characterize agency relationships as the dependency of one individual, the principal, upon the actions of another person, the agent. Also, information asymmetries are characteristic for all agency problems (Fritsch et al., 2005, p.291). Based upon this definition, it is possible to identify multiple principal-agent relationships in the insurance market. First, consider the relationship of insurer and intermediary. The insurer's profit depends upon the intermediaries' effort and actions to sell insurances. Hence, the insurer's role is the principal, whereas the intermediary acts as an agent because the intermediary has better information about the insurance holder's risks. A second relationship can be identified between the insurer and the policy holder, as the insured has private information about, for example, his health status. Agency relationships result in different problems that are categorized in basically three groups - adverse selection, moral hazard and hold-up - and affect the market outcome. The economic task of intermediaries is to reduce the informational asymmetries between the insurer and the insured and, therefore, to partially overcome market failures. But, the relationship between intermediary and policy holder is characterized by an agency relationship as well and the economic environment allows

[1] Directive 2002/92/EC of the European Parliament and of the Council of 9 December 2002 on insurance mediation

for opportunistic behavior by the insurance agent. After identifying a potential agent, it is hardly possible for the consumer to monitor the intermediaries' effort to search for possible insurance contracts. Thus, the agent can exploit his superior knowledge of the products and the market. This situation is dominated by hidden action that induces moral hazard, since the consumer (the principal) can neither monitor the intermediaries' (agents) effort to find a suitable contract nor can the consumer evaluate the final choice completely. It seems reasonable that on the one hand high effort results in higher costs on the agent's side than low effort. And, on the other hand the higher the agents' effort the better might be the resulting policy. However, the remuneration system in the insurance sector is such that the agents will be compensated if the consumer signs a contract, regardless of the effort spend. As the agent has an incentive to execute low effort and the principal would like him to put in high effort, an appropriate incentive scheme is needed to solve the situation. One way to solve principal-agent problems is to connect the remuneration of the agent to the final results that is experienced by the principal. But, this link is missing in insurance market because the agent's remuneration is not under direct control of the consumer. But, negligence liability might be able to solve the principal agent problem.

The market for intermediaries' services is regulated by law since the implementation of the EU directive. The German Insurance Contract Act (VVG)[2] lists several duties which an insurance intermediary must fulfill. *"If the difficulty of assessing the insurance being offered or the person wishing to take out insurance himself and his situation gives occasion thereto, the insurance intermediary must ask the person* [...] *about his wishes and needs and* [...] *must advise* [...] *and state reasons for each piece of advice given in respect of a particular insurance.*[...]*"* [§ 61 VVG]. Furthermore, the Insurance Contract Act imposes a fault-based liability on the agents whenever the advisory obligations are not met. *"The insurance intermediary shall be obligated to compensate for loss incurred by the person wishing to take out insurance on account of a breach of one of the duties under section 60 or section 61. This shall not apply if the insurance intermediary is not responsible for the breach of duty."*[§ 63 VVG].

The aim of this thesis is to work out the connection between the legal framework and the economic theory. In particular, the answers to the questions "How do intermediaries influence the demand for insurance?", "How can miscounseling be defined by using an economic approach?", and lastly "Does the fault-based liability rule set the right incentives or does it fail?" shall be assessed. Those questions are answered in chapters 2, 3 and 4.

[2]Insurance Contract Act (Versicherungsvertragsgesetz (VVG)) November 23, 2007 (Federal Law Gazette Part I, page 2631), becoming effective on 01/01/2008; last changes 07/27/2011 (Federal Law Gazette Part I, page 1600) with effect from 08/04/2011.

Chapter 2, "Law versus Economics"[3], states possibilities for an intermediary to influence the insurance demand decision as the economic theory suggests, and to discuss how those economic determinants might be useful in order to interpret the legal duties that arise from the Insurance Contract Act. Therefore, the chapter follows two strands. On the one hand, the determinants that are crucial for the insurance demand decision, such as the attitude towards risk or the initial wealth level, are derived. Ongoing research suggests that consumers are not able to assess all relevant information correctly. For example, Jaspersen and Aseervatham (2012) find that consumers use heuristics to determine their insurance demand. Therefore, the individuals do not choose their insurance products as the economic theory suggests. They make mistakes (Schwarcz, 2010). Hence, in general intermediaries might enable a better choice. On the other hand, the chapter focuses on the legal duties that are stated in §§ 60,61 VVG. The law states basically four requirements: First, the consideration of a "sufficient" number of alternatives, second, taking the consumers' specific wishes and needs into account, third, the provision of a founded advice and finally, the requirement to provide documentation. The open terms "sufficient", "specific" and "founded" can be interpreted by using the determinants that arise from the economic theory. Hence, by combining both strands it becomes possible to state specifically the required and necessary actions of intermediaries. The chapter demonstrates this on the basis of different examples.

Chapter 3, "Miscounseling in the German Insurance Market"[4], deals with the incident of miscounseling itself and how to identify corresponding situations from an economic point of view. In order to get an idea of counseling situations in general, I conducted several interviews with consumers of insurance. The consumers criticize that the agent or broker did not provide the right information in order to enable a better choice. Hence, the interaction of consumer and intermediary changes the decision-making situation for a consumer. While, Chapter 2 focuses on the ideal counseling situation, this chapter takes into account that an advice might tend in the right direction but, still, is not ideal. In order to differentiate between a good match of preferences and products and an ideal match, the chapter uses the idea of representing heterogeneous products in a spatial relationship, as suggested by Hotelling (1929) and Salop (1979). To identify the ideal contract among differentiated products, I use the consumer theory developed by Lancaster (1991), that refers to the characteristics of products rather that to the product itself. Thus, the utility function becomes more flexible. This model yields an information based definition of miscounseling that states that information which

[3]Law versus Economics? - How should insurance intermediaries influence the insurance demand decision, accepted at the 30th Annual Conference of the European Association of Law and Economics (EALE, Warsaw, Poland, September 2013).

[4]Miscounselling in the German Insurance Market - Utility-Orientated Implications for the Meaning of Miscounselling, forthcoming in *Journal of Consumer Policy*; accepted at the 14th Annual Conference of the International Network for Economic Research (INFER, Coimbra, Portugal, May 2012), at the Conference of the Eurasia Business and Economic Society (EBES, Warsaw, Poland, September 2012).

increases utility losses is misleading. Any other advice, even if it is not the ideal one, cannot be considered as miscounseling. Following this definition, the chapter suggests a rewording of the legal rules that focuses only upon the availability of information.

"Liability rule failures?" reads the heading of Chapter 4[5]. The paper addresses the consequences of poor advice and analyzes the role assigned to the courts as well as potentential failures of the liability rule. Even though the German law passed a liability rule for miscounseling the discussion about setting the right incentives in order to prevent opportunistic behavior is still ongoing. For example, Focht et al. (2013) and Hofmann and Nell (2011) discuss the effects of different remuneration schemes, fee-for-advice versus commission system. Furthermore, in 2012, the legislation set a cap on commissions for private health insurances. Hence, additional instruments to strengthen consumer protection are issued. Thus, the question arises, why additional measures become necessary? Stated the other way around, it is questionable if the liability rule works as intended or if it fails. The economic analysis of liability rules is well established in the law and economics literature (e.g. Shavell (1987) or Miceli (2004)). Endres (1991) analyzes different failures of the liability rule in several settings. This chapter discusses twelve court decisions that may provide evidence for failures of the current liability rule. Especially the decision of the courts on how to determine the due care levels of each party involved seems challenging because that definition provides the benchmark for the evaluation of the single actions. If the courts are systematically wrong in determining the to-be standards, the liability rule will fail.

Chapter 5 summarizes the results of the three research perspectives and provides an overall conclusion. Also, the chapter takes a careful view on the development of consumer protection in the field of insurance intermediary services and provides ideas for further research.

[5]Liability Rule Failures? Evidence from German Court Decisions accepted at the 18th Annual Conference of The International Society for New Institutional Economics (ISNIE, Durham, USA, June 2014); accepted at the 31th Annual Conference of the European Association of Law and Economics (EALE, Aix-en-Provence, Fance, September 2014).

2 Law versus Economics? - How should Insurance Intermediaries influence the Insurance Demand Decision

2.1 Introduction

Insurances are considered to be complex experience and credence good (Wein, 2001, p.69). Therefore, consumers tend to have difficulties in making informed buying decisions, which might explain the preference concerning the distribution channels. In Germany insurance policies are predominantly sold by insurance intermediaries (Insurance Europe, 2010). The role intermediaries occupy in the insurance market is highlighted by the amount of the pre-tax premiums which added about 7.16% to the German GDP in 2011 (Gesamtverband der Deutschen Versicherungswirtschaft e. V, 2011, p.56).

The insurance market is characterized by imperfections and limited information which results in sub-optimal contracting between the insurer and the consumer. The economic task of any intermediary is to partially overcome the resulting market failure. For that reason, an insurance agent is supposed to match the consumers' preferences with the supply of policies by guiding individual insurance demand decisions. Hence, the relevant economic determinants display possibilities for the intermediary to intervene and to improve the individual choice, ideally. Nevertheless, the economic environment allows for opportunistic behavior by the insurance agent since his knowledge of market conditions is superior and the existing remuneration scheme supports that tendency. For that reason, laws have regulated insurance intermediaries since the implementation of the EU directive. Legal regulations state obligations an intermediary must fulfill in order to be exempted from liability. From a law and economics perspective, the legal requirements have to be such that the agent chooses not to behave opportunistically. This can only be achieved if economic determinants are reflected in legal obligations. Furthermore, since the liability rule refers to a default, the jurisdiction needs diligence levels as a reference in order to benchmark the intermediaries' behavior and counseling advices.

Recently, the jurisdiction had to deal with complaints about the counseling activities of intermediaries. Following is a brief look at three cases and the final court decisions:

1. Automobile Insurance - Reference OLG Hamm 20 U 131/09[1]:
   The consumer (plaintiff) purchased a used RV (recreational vehicle), which was partially financed by way of credit during a four-year time frame. He demanded a automobile insurance policy from the insurance agent and ended up with a part insurance cover (sum insured: 21.000 EUR) and the mandatory auto liability insurance. Shortly after the policy was taken out, the RV was destroyed in an accident. It is questionable if the intermediaries' counseling was faultless since he did not give advice that would have resulted in a comprehensive insurance cover in order to secure the credit to a similar level. The court decided that the intermediary did not neglect any legal obligations, inter alia, because automobile insurances are not considered complex products. Additionally, the consumer had taken out that kind of insurance before. Thus, the consumer is conversant with the differences between comprehensive, full coverage insurance and the liability partial coverage insurance. Also, the fact that the RV was partially financed did not trigger a duty to mention the option of comprehensive coverage from the court's point of view. Therefore, the case was dismissed.

2. Residential Building Insurance - Reference LG Ingolstadt 33 O 136/10[2]:
   In order to update the insurance coverage on her residential building policy, the consumer (plaintiff) switched to a more current tariff. During the counseling interview, the consumer stated her desired for information about the coverage of all water pipes because of the swimming pool in the backyard. Eventually, one of the water pipes in the backyard broke and the water caused 17.000 EUR worth of damage, which was not covered by the insurance company. It is questionable if the insurance agent has to compensate the damage since he stated that all water pipes were covered, which obviously was not the case. As in the previous example, the court decided that the intermediary did not neglect any of his duties, even though his statement concerning the coverage was wrong. However, it cannot be expected that an insurance agent extents the coverage beyond the policy conditions which are assumed to be known by the insurance customer. Additionally, consumers should know that gutters cannot be covered by insurance because they tend to clog if not maintained regularly. Thus, the case was dismissed.

3. Private Health Insurance - Reference OLG Munich 25 U 3343/11[3]:
   As a result of a counseling interview with an insurance intermediary, the consumer (plaintiff) canceled his health insurance policy after 25 years in order to update the insurance conditions. Later, the consumer realized that the new contract changed certain conditions to the worse. Additionally, it was not possible to transfer the old-age reserves, which were to reduce the premium once the insured turned 65

[1]OLG Hamm (Higher Regional Court), court decision 12/04/2009 - 20 U 131/09.
[2]LG Ingolstadt (Regional Court), court decision 12/29/2010 - 33 O 136/10.
[3]OLG Munich (Higher Regional Court), court decision 06/22/2012 - 25 U 3343/11.

years old. Thus, additional costs resulted from the worsened conditions and the loss of reserves to compensate an increase in premiums. It is questionable if the intermediary obeyed his counseling duties. In this case, the court decided in favor of the plaintiff since the initial contact was established by the intermediary. Additionally, the insurance agent did not correct wrong assumptions about the relevant policy changes and he did not discuss the problem of the non-transferability of old-age reserves or the resulting disadvantages.

These three examples have the same question in common: was the counseling interview and the resulting advice at fault for damages or not? The aim of this chapter is to state possibilities for an intermediary to influence the insurance-demand decision as the economic theory suggests, and to discuss how those economic determinants might be useful in order to interpret legal duties and to evaluate the faultlessness of counseling advice. As well, the identification and discussion of the influence of economic determinants and their possible legal counterparts build Sections 2.2 and 2.3. Section 2.4 states specific theoretical examples to examine the interaction of law and economics. Finally, Section 2.5 concludes and refers back to the stated court decisions.

2.2 Insurance Demand

The first step towards an answer to the question "How do intermediaries influence the demand for insurance?" has to be a consideration of the economic theory on insurance and uncertainty. Research in this field is ongoing since the early 1960s when researchers started to relate insurance issues to the economic theory (Loubergé, 2000, p.4). Since then the expected utility approach remained predominant even though other approaches emerged. In this section the basic model of insurance demand theory is introduced and will be extended by background risks in order to examine the insurance decisions of consumers in the presence of multiple risks. The consideration of more than one risk might yield more insights.

2.2.1 The Basics: Insurance Demand Theory

The possibility to buy an insurance policy enables households to reduce or even to prevent risks (Zweifel and Eisen, 2012, p.101). In fact, the aversion against risks constitutes the crux of the insurance demand theory which basically is an application of the expected utility approach by von Neumann and Morgenstern.
In the simplest version of insurance demand theory, supply of insurance is exogenous. This assumption might be crucial if the insurant is a firm instead of a consumer. Whereas large firms have the possibility to negotiate customized insurance solutions, the consumers must choose from a variety of generally standardized products. Therefore, it seems feasible to stay with the assumption of exogenous supply, for the purpose of this

chapter[4]. Considering uncertainty, a household has to form expectations about future wealth[5] assuming that only a single risk occurs. A loss (L) might occur with a likelihood (ρ) and yield a reduction of the initial wealth (W_0). Assuming only two possible states of the world [$W_1 = W_0 - L$,$W_2 = W_0$], the consumer expects a final wealth level (W_E).

$$W_E = \rho(W_1) + (1 - \rho)W_2 \tag{2.1}$$

At this point, the individual's attitude towards risk has to be discussed. People's attitude towards risks can either be distinguished by the willingness to pay in order not to bear a risk or the difference between the utility of the expected value of a gamble and the expected utility of the gamble (Equation 2.2). Only a risk averse consumer prefers a certain to an uncertain payment, i.e. the utility of the expected value of the lottery or gamble is higher than the expected utility of the lottery ($EU(W_E)$; Equation 2.2) itself. Therefore, the consumer is willing to pay a premium in order to transfer the risk to a third party, namely the insurer.

$$EU(W_E) = \rho\upsilon[W_1] + (1 - \rho)\upsilon[W_2] \tag{2.2}$$

Figure 2.1 shows the utility of different wealth levels for a risk averse individual. State W_1, the low wealth state, and W_2, the high wealth state, are depicted as well. Assuming some loss probability ρ, the expected wealth (W_E) and the corresponding utility levels, either certain or uncertain, can be read of the graph ($U(W_E) > EU(W_E)$). Also, the certainty equivalent (W_{CE}) as well as the risk premium is shown.

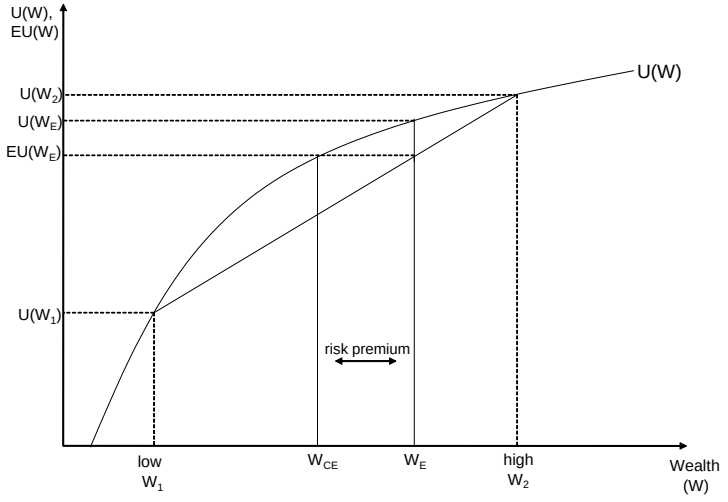

Figure 2.1: Expected utility function

[4]Supply of insurance products will also be exogenous when assuming perfect competition.
[5]The whole section refers to Zweifel and Eisen (2012, pp.71-110). The notation differs slightly.

From Equation 2.1 and 2.2 follows that, if the expected value of the lottery remains unchanged, the consumer maximizes the expected utility if the marginal utility of risky wealth is equal in each state.

$$\begin{aligned} -\frac{(1-\rho)}{\rho} &= -\frac{(1-\rho)}{\rho}\frac{\upsilon'[W_2]}{\upsilon'[W_1]} \\ \upsilon'[W_1] &= \upsilon'[W_2] \end{aligned} \tag{2.3}$$

This optimality condition can only be satisfied by equalizing the wealth levels in the two states. Graphically, the optimality condition (Equation 2.3) is shown in Figure 2.2. This figure can be derived from Figure 2.1 simply by calculating the total differential of the expected utility function to determine the slope of the indifference curves. The budget line represents the trade-off between the good and bad state as long as the expected wealth level remains unchanged which is the case when the insurer calculates the premiums at a zero profit level. The indifference curve through endowment point A is characterized by a lower level of expected utility than the indifference curve through point C even though the expected wealth (W_E) is identical. Again, it becomes obvious

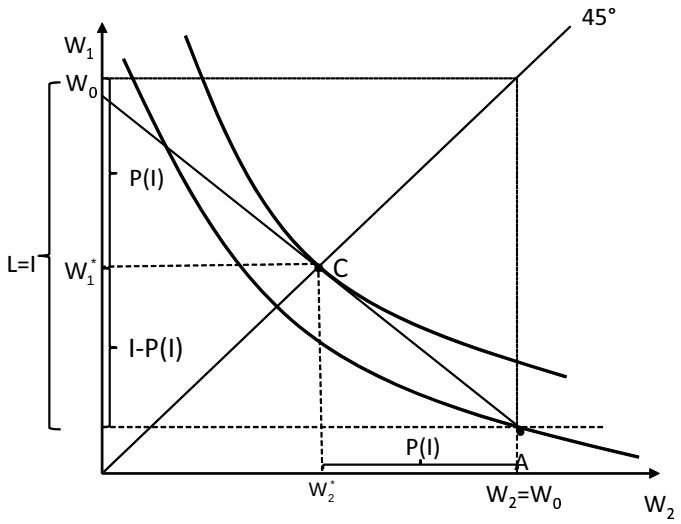

Figure 2.2: Max. expected utility

that a risk-averse individual is willing to give up a certain amount of money in both states in order to transform a risky situation into a certain situation. By paying a premium ($P(I)$) the consumer actually buys the promise that the insurer will provide an indemnification payment $I = \alpha L$ in the case of a loss. Obviously, the variable (α) specifies the degree of coverage: $\alpha = 1$ indicates full coverage, whereas $\alpha < 1$ refers to partial cover. The possibility to buy an insurance policy changes the final wealth levels as stated in Equation 2.4.

$$\begin{aligned} W_1 &= W_0 - L - P(I) + I \\ W_2 &= W_0 - P(I) \end{aligned} \tag{2.4}$$

Even though the loss L might not occur, the consumer still has to pay the premium. Therefore, the wealth level in the "no loss" state W_2 reduces, too. Despite the insurance, no state of the world is certain and, therefore, the consumers' aim is to maximize expected utility, given certain probabilities and premiums.

$$EU = \rho\upsilon[W_0 - L - P(\alpha L) + \alpha L] + (1-\rho)\upsilon[W_0 - P(\alpha L)] \tag{2.5}$$

In Equation 2.5 the premium depends on the indemnification payment. Those premiums can be further specified in order to distinguish "fair" and "unfair" premiums. While fair premiums are equal to the expected losses, unfair premiums exceed them. In order to demonstrate both cases, the premiums can be stated as $P = (1+\lambda)\rho\alpha L$. Whenever the premium equals the expected losses, the proportional loading (λ) has to be zero. Inserting the stated premium function into Equation 2.5 and optimizing with respect to α yields the optimality condition and implicitly the optimal degree of insurance coverage.

$$\begin{aligned} max_\alpha EU &= \rho\upsilon[W_0 - L - (1+\lambda)\rho\alpha L + \alpha L] + (1-\rho)\upsilon[W_0 - (1+\lambda)\rho\alpha L] \\ \frac{\upsilon'[W_2]}{\upsilon'[W_1]} &= \frac{1-\rho-\rho\lambda}{1-\rho+\lambda-\rho\lambda} \end{aligned} \tag{2.6}$$

First, assume a "fair" premium that does not induce any changes to the level of expected wealth and yields expected profits of zero to the insurance company. As stated, in this case the loading λ equals zero. The optimal condition can be derived from Equation 2.6 and again states that it is optimal to equalize the marginal utilities of risky wealth, $\upsilon'[W_1] = \upsilon'[W_2]$. The only way to accomplish that condition is to fully cover the loss, implying $\alpha = 1$. After considering the optimal insurance demand assuming a premium equal to expected losses, the case of unfair premiums shall be discussed next. In this case, the proportional loading λ has to be positive. From Equation 2.6, it follows that in this case the marginal utility of risky wealth in the loss state has to be greater than the marginal utility in the state without a loss. Because of the shape of the utility function of a risk averse individual, it has to be the case that the level of wealth without a loss exceeds the final wealth level in the loss state, $W_2 > W_1$. Therefore, it is not optimal to buy comprehensive full coverage but to insure partially which forces α to be less than 1.

2.2.2 Multiple Risks

In the previous section, insurance demand was analyzed while focusing only on one risk a consumer is confronted with. Furthermore, the basic model solely accounts for

insurable risks under complete market conditions. Undoubtedly, consumers may face several risks at the same time - which might as well be interdependent. Therefore, it is questionable if the consideration of only one risk at a time falsifies the demand decisions. For example, an accident might also induce a wealth effect due to liability claims or personal skills degenerate as the use of technology further evolves. Other risks such as war, changes in general market conditions and the loss of skills might not be insurable at all (Zweifel and Eisen, 2012, p.96).Doherty and Schlesinger (1983) state that for an optimal insurance demand, the correlation between insurable and uninsurable risks matters. They introduce an uninsurable background risk to account for some incompleteness in the insurance market. Considering this additional risk, the consumer is confronted with four possible states of the world: 1. the initial wealth levels remains unchanged; 2. the insurable loss (L) occurs and reduces the wealth level accordingly; 3. only the uninsurable loss (N) happens, or 4. both incidents take place. A single loss arises with either probability ρ_L or ρ_N. Considering ρ_L and ρ_N, it is possible to assign a probability of occurrence ($\rho_1 - \rho_4$) to each state. Comparing this model to the insurance demand theory stated in the previous section, it is obvious that the expected utility function has to be adjusted for the additional states. Furthermore, the premium function has to be adapted slightly by comparison with the previous section and becomes $P = (1 + \lambda)\rho_L \alpha L$.

$$\begin{aligned} EU = {} & \rho_1 \upsilon[W_0 - (1+\lambda)\rho\alpha L] \\ & + \rho_2 \upsilon[W_0 - (1+\lambda)\rho\alpha L - (1-\alpha)L] \\ & + \rho_3 \upsilon[W_0 - (1+\lambda)\rho\alpha L - N] \\ & + \rho_4 \upsilon[W_0 - (1+\lambda)\rho\alpha L - (1-\alpha)L - N] \end{aligned} \tag{2.7}$$

The evaluation of Equation 2.7 at $\alpha = 1$ yields Equation 2.8.

$$\frac{dEU}{d\alpha}|_{\alpha=1} = \rho_L L[\rho_N(1+\lambda) - \rho_{N|L}] \cdot [\upsilon'[W_1] - \upsilon'[W_3] - \upsilon'[1]\lambda] \tag{2.8}$$

At this point, it is possible to determine the optimal degree of coverage while considering different cases. Assuming a fair premium ($\lambda = 1$) and independence of the losses, i.e. $\rho_N = \rho_{N|L}$, Doherty and Schlesinger (1983) state that it is optimal to opt for full coverage. Whenever the losses are correlated, either positively ($\rho_N < \rho_{N|L}$) or negatively ($\rho_N > \rho_{N|L}$), it is optimal to demand more than full coverage, or even only partial coverage respectively. To demand more than full coverage in the event of a positive correlation between L and N, becomes plausible if one considers a compensation of the background risk N. In the case of an unfair premium ($\lambda > 1$) partial coverage is optimal if there is no correlation or a negative correlation. Whereas in the event of positive correlation, the optimal degree of coverage is indeterminate and depends on magnitude of the loading λ (Doherty and Schlesinger, 1983), or on the size of the loss N (Zweifel and Eisen, 2012, p. 99). Fei and Schlesinger (2008) extend the outlined model

on multiple risks by state dependency. They show that if N is larger in a state of the world with an insurable loss, the consumer demands more than full coverage, even if the premium is fair. On the contrary, if N is larger in a state of the world when no insurable loss occurs, the consumer demands only partial coverage. A precautionary motive serves as an explanation for that behavior in each case. In the first case, the precautionary motive yields a compensation of the uninsurable loss by over-insuring the other loss. In the second case, the consumers' precaution results in partial coverage in order to reduce the premium and, thus, to be able to fund the background risk. As examples for a state dependent background risk serve other wealth reducing facts that only occur in the state of a loss. For instance, consider a cap driver who has an accident and, as a result, loses his driver's license. The loss of the license is not insured. In the no-loss state, the background risk to lose the license, thus, to lose the ability to earn income does not exist.

Considering those extensions of the basic insurance demand model, it has to be stated that the findings are rather ambivalent. For the purpose of this chapter, the consideration of background risks is relevant to the effect of their influence on the expected utility function. However, since the results depend upon the correlation of insurable risk and background risk, those will be most widely ignored when modeling other determinants of decision making. Nevertheless, background risks remain one of the aspects an intermediary has to cope with during a counseling situation.

2.2.3 Discussion - Determinants of Insurance Demand

The previous section outlined the insurance demand theory by simply assuming that all relevant information is known. As a result, the determinants of insurance demand can be derived. There is: 1. the degree of risk aversion, 2. the premium, 3. the wealth level, and 4. the correlation with uninsurable background risks. Considering the degree of risk aversion, the dislike of risks leads to the demand of insurances in the first place. It is plausible that a higher risk aversion affects the degree of coverage whenever this differs from a comprehensive payment. Moreover, even if the premium is loaded, the insurance demand increases whenever the degree of risk aversion rises. Additionally, Mossin (1968) found that in cases of constant and decreasing absolute risk aversion, the consumers tend to reduce the insurance demand as a reaction of a loaded premium. Since insurers have to cope with administrative costs, anticipate moral hazard, and to have some liquidity reserves, it is quite feasible that the premium always differs from a fair premium. Thus, the theory predicts that partial coverage would be optimal. The coverage reduction can be established by either a deductible, or alternatively a coinsurance. But, the previous section also states that one might not be able to generalize those findings since the correlation with an uninsurable background risk is possibly contradicting. In addition to the stated determinants, the consumer also has to have a good idea about possible states of the world and the set of potential actions, the probability of the occurrence of a loss, and financial consequences in each state in order to solve the decision-making problem

(Zweifel and Eisen, 2012, p.75).

Consumers sometimes behave other than the classical theory predicts and for example buy too much insurance or, stated differently, buy insurances with low or no deductibles even if the premium is loaded (Shapira and Venezia, 2008). Such anomalies might arise because the consumers make mistakes (Schwarcz, 2010). Among mistakes are an overestimate of the probability of a damage, or even uncertainties about the effect of a loss event on the final wealth level (Mossin, 1968). Schwarcz (2010) offers an alternative explanation whereupon consumers value insurance more than the expected utility function is able to prognosticate, so their behavior is not a result of limited information or knowledge. If the latter hypothesis is true, it should be impossible for an insurance agent to influence the insurance demand at all. But, Schwarcz (2010) analyzes different demand anomalies such as insurance demand for small financial risks, or preferences for insurances with small deductibles, and he finds that people simply make mistakes while taking out insurance policies. Additionally, consumers can hardly cope with the multitude of competing insurance companies and their differentiated products. Both aspects, the tendency to estimate probabilities of biased occurrences, and the fact that people cannot overlook the insurance market and therefore use heuristics to determine their demand for insurance, cause sub-optimal decisions (Hofer, 2008; Jaspersen and Aseervatham, 2012; Schwarcz, 2010). Since it seems plausible to assume that the demand for insurance reflects an uninformed choice that might additionally be driven by cognitive limitations, it has to be possible for an expert to intervene and, thus, to enable a better choice. Table 2.1 summarizes the determinants and the possible mistakes.

Economic Determinants	Mistakes
attitude towards risk	small risks are evaluated wrong
premium	too low or no deductible even if the premium is loaded
correlation with background risks	no consideration of background risks
set of actions	too many policies to cope with
loss probability	over- or underestimation
financial consequences for wealth levels	uncertainties about the effect of a loss event in different possible states of the world

Table 2.1: Economic Determinants / Mistakes

2.3 Intermediary: Duties and Responsibilities

Whereas the last section dealt with the basic insurance demand theory, outlined the knowledge and the information a consumer ideally needs to solve the decision-making problem and discovered the existence of demand anomalies, this section focuses on the tasks an intermediary has to cope with.

2.3.1 Influence upon Economic Determinants

Consumers might make mistakes while taking out insurance policies. This fact leads directly to the tasks an insurance agent should perform from an economic point of view. As pointed out, a consumer has to have a good idea of the probability of the loss occurrence. If this estimation is biased, the insurance demand decision concerning the coverage will be sub-optimal. Let the objective probability of a loss be ρ, but the subjective estimation of the loss be q with $q > \rho$, i.e. an overestimation of the loss probability. Additionally, assume a loaded premium so that a partial coverage becomes optimal. In a case with both, a loaded premium and an overestimation, the approach to maximize the expected utility changes from Equation 2.6 to Equation 2.9.

$$max_{\alpha} EU = qv[W_0 - L - (1+\lambda)\rho\alpha L + \alpha L] + (1-q)v[W_0 - (1+\lambda)\rho\alpha L] \tag{2.9}$$

Equation 2.9 states that the overestimation of the loss occurrence does not affect the premium calculation by the insurer, because the mistake is assumed to happen on the part of the consumer. Figure 2.3 illustrates the effect of the overestimation. First, Figure 2.3 shows that it is optimal to choose D whenever the premium is loaded and the probability of loss occurrence is still estimated correctly. But, as soon as the consumer overestimates the loss occurrence, the expected utility indifference curve becomes flatter, which results in E as the optimal choice. The reason for the change of the slope is quite intuitive. In order to increase wealth in the loss state, a consumer is willing to give up more wealth in the no-loss as the probability of a loss increases. Hence, the indifference curve has to become flatter. Figure 2.3 shows this intuition graphically. To increase wealth in the loss state by ΔW_1, a consumer is willing to give up wealth according to line segment a in the no-loss state if the loss probability is ρ (solid indifference curves). However, if the probability increases, the consumer is willing to give up more wealth in the no-loss state (line segment b) to keep expected utility a constant level. This can be read off the dashed indifference curves. But, the dashed indifference curves are the result of a mistake. Hence, by choosing E instead of D the consumers' expected utility level decreases because the insurance coverage is too high. There is a solid indifference curve (even though not depicted) that passes through E. Since it is nearer to the origin, the utility is lower.

Equation 2.10 states the same result formally. Compared with a situation in which the premium is loaded, but the estimation of the loss probability is correct, the fraction

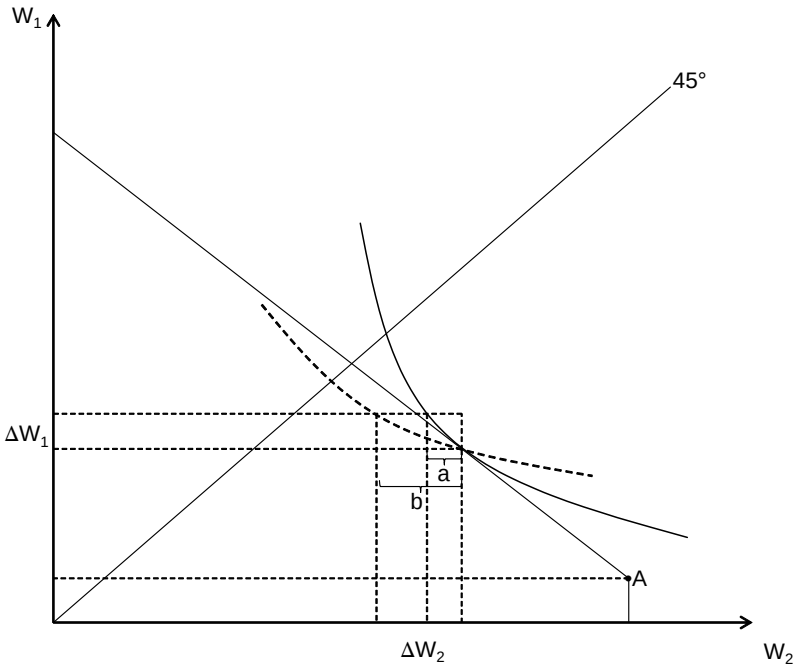

Figure 2.3: Optimal coverage with a loaded premium and overestimation of loss probabilities

on the right hand side of the equation increases because $\rho < q$. The increase of the fraction is equivalent to a convergence of wealth levels in the different states which can only be accomplished by a rise in α.

$$\frac{\upsilon'[W_2]}{\upsilon'[W_1]} = \frac{q - q\rho - q\rho\lambda}{\rho - q\rho + \lambda\rho - q\rho\lambda} \tag{2.10}$$

Since any divergence from the optimal α results in a loss of expected utility, the intermediaries' task in this case should be to discover the objective loss probabilities under consideration of the individuals' situation.
The stated example shows quite obviously, that an intermediary might be able to fix the mistakes since he is an expert, and therefore his choices should be superior to the consumers' considerations. The insurance demand is driven by several determinants as pointed out in Section 2.2. From an economic perspective almost all those determinants might be the cause of mistakes, and thus establish opportunities to act for an insurance agent. Consumers might misjudge the amount of a loss, or they do, or do not consider the existence of uninsurable background risks. Additionally, consumers might not even be aware of some risks, and therefore they do not take all relevant states of the world into consideration during the decision-making process. Undoubtedly, since consumers can hardly cope with the multitude of insurance products, they might not take all pos-

sible actions into account. Importantly, preventive effort can reduce or avoid losses and should be considered as an alternative to insurance products or even as a complementary action.
From an economic point of view, the question of how insurance intermediaries should influence the insurance demand decision can be answered when focusing on the determinants of insurance decisions and possible mistakes. Nevertheless, the degree of risk aversion represents a factor that is hardly known by the intermediary, and can be identified indirectly only. Determinants such as age, income and sex are relevant with respect to the risk attitude. However, those factors can be considered by the intermediary during counseling but the risk attitude cannot be influenced directly. This insight leads to the statement that an intermediary can deliver information and can even correct mistakes, but the final evaluation of the product alternatives and the final choice can only be performed by the consumer himself. Thus, the intermediary can only provide support by counseling and delivering information, but he cannot entirely solve the decision-making problem on the consumers' behalf.

2.3.2 Legal Obligations

In contrast to the previous part, this subsection will focus on the legal instead of on the economic point of view because the working conditions of intermediaries changed as a result of market interventions by the European Union. Initially, the supply of insurance products increased in the 90's as a result of the deregulation of the European market in 1994. Moreover, the products themselves became more heterogeneous since the preventive control of the general insurance conditions by the regulation authorities was abolished in the cause of the deregulation process (Ihle, 2006, p.52). Even though the deregulation stimulated the competition in the field of insurances, the consumer protection suffered losses (Hofer, 2008, p.93). In order to re-strengthen the consumer protection, the European Union issued a directive in 2001 that regulates the insurance intermediaries and their counseling activities by law rather strictly.

The German Insurance Contract Act (VVG)[6] lists several duties, which an insurance intermediary must fulfill. First, the intermediary has to base his advice upon a sufficient number of products that are suitable for the individual situation of a consumer with regard to objective criteria, § 60 VVG. For the number of evaluated policies to be "sufficient", a broker has to refer to the entire market, whereas other agents - tied agents in exclusivity or agents that cooperate only with a couple of insurers - have to solely consider products of their co-contractors (Dörner, 2010, § 60 recitals 3,14,15). If the advice is based upon selected companies or products only, the consumer has to be notified (Michaelis, 2010, p.67). Also, the Insurance Contract Act states that the insurance agent has to ask the consumer about his wishes and needs, § 61 VVG, in order

[6]Insurance Contract Act (Versicherungsvertragsgesetz (VVG)) November 23, 2007 (Federal Law Gazette Part I, page 2631), becoming effective on 01/01/2008; last changes 07/27/2011 (Federal Law Gazette Part I, page 1600) with effect from 08/04/2011.

to obtain all relevant information. Whereas the wishes are of a rather subjective nature, the intermediary is supposed to focus on the objective needs of a person, and if necessary, to bring both aspects in line (Michaelis, 2010, p.86). Additionally, if obviously wrong assumptions about the needs or the details of an insurance policy becomes known, an intermediary has to fix those mistakes (Dörner, 2010, §61 recitals 25,26). Furthermore, § 61 VVG states an obligation to give advice. The intermediary has to discuss how and why he selected the products, and also, which of the alternatives constitutes the best choice given the circumstances of the single consumer. To sum up, the Insurance Contract Act assigns basically four duties an intermediary has to meet: 1. provide information based upon a sufficient number of alternatives; 2. self-dependently inquire relevant factors; 3. provide advice and the reasons for the choice, and 4. the duty to keep records. In contrast to § 347 para. 1 HGB[7] which states the due care and diligence of a prudent businessman referring to commercial transactions, the VVG further specifies the criterion for diligence. Additionally, the Insurance Contract Act refers to the individual situation of a consumer. Therefore, the applicable diligence level is dependent on the particular case (Zinnert, 2010, p.53), but the intermediary still has to obey the diligence of a prudent businessman. Furthermore, the Insurance Contract Act states a liability rule in § 63 VVG: the intermediary is liable for any damages, whenever he neglects his duties. Of course, the breach of duty and the resulting damages have to be causally determined in order to trigger the liability, and thus, yield compensation.

2.3.3 Discussion: Law and Economics

First, intermediaries can influence the insurance demand decision of consumers by modifying the economic determinants, or by simply adding relevant information. Second, the Insurance Contract Act assigns four legal duties that an intermediary has to meet; however, the liability rule which is supposed to ensure that the insurance agent performs his task properly refers to the legal duties instead of the economic variables. Since the economic determinants are more specific than the legal duties, the variables can be used to substantiate those obligations. Hence, it should be possible to match each economic variable to a legal duty in order to combine law with economics.

Table 2.2 shows that the economically relevant variables have legal counterparts. For example, the duty to base the advice upon a sufficient number of potential alternatives matches the need of knowing the whole set of possible actions in order to solve the economic decision-making problem. The necessity to evaluate the monetary consequence in each relevant state of the world, finds its counterpart in the duty to inquire the relevant factors. Of course, those stated duties are preconditions to the duty to give advice, but since the advice should be well founded, this duty is more far-reaching. Thus, the correlation with uninsurable background risks, as well as the supplementary

[7] German Commercial Code (Handelsgesetzbuch (HGB)) May 10, 1897 (Federal Law Gazette Part III, No. 4100-1), becoming effective on 01/01/1900; last changes 12/20/2012 (Federal Law Gazette Part I, page 2751).

Legal Duties	Economic Determinants
Provide information about alternatives	possible actions, i.e. possible policies premium
Inquiry of relevant factors	objective possibility of loss occurrence potential amount of the loss possible states of the world
Advice	correlation with uninsurable background risks preventive effort to reduce losses situational: selection of alternatives
Documentation	——
——	degree of risk aversion

Table 2.2: Economic Determinants / Legal Duties

consideration of preventive effort and precaution, is part of the duty to give advice. However, the degree of risk aversion as an economic determinant can hardly be allocated to one of the legal duties because it is subjective and unquantifiable. Also, there is no economic need for any documentation even though that legal duty helps to provide evidence for any counseling or miscounseling.
As far as the liability is concerned, § 63 VVG states that whenever an insurance agent neglects any of his duties, he has to compensate the resulting losses. From an economic point of view, it is the utility level that matters for compensation (Cooter and Ulen, 2004, p.312). In the case of uncertainty, it should be the level of expected utility. Consider the previously introduced example in which the consumer overestimated the probability of a loss and ended up with too much insurance (Figure 2.3). In this case the intermediaries' duty is to inquire all relevant factors objectively and to re-estimate the loss probability. Figure 2.4 represents the indifference curves (solid) that correspond to the objective loss probabilities ρ. Those indifference curves imply the expected utility levels that arise from the wealth levels in points D and E. A consumer who overestimates the loss occurrence will choose E as depicted by the dashed indifference curve[8], and is therefore worse off than in the optimal point D. Thus, an insurance agent who does not correct the initial estimation has to pay a compensation that enables the consumer to obtain the same expected utility level which he would have had by choosing D. In the depicted case, the consumer pays a premium that is too high. To recover the utility level, the payment would have to result in a higher wealth level in the loss state than the consumer actually experiences in E. On the contrary, the premium, as well as wealth levels, is accounted for in monetary terms. Therefore, it would be a feasible compensation to force the insurance agent to refund the overpaid premium $\Delta P(I)$. In return, the consumer has to

[8]The reason for this indifference curve being flatter follows the same rational as in Figure 2.3. As the probability of a loss increases a consumer is willing to give up more wealth in the no-loss state.

give up an amount ΔW_1 to reduce the indemnification payment. As a result, D will be restored.

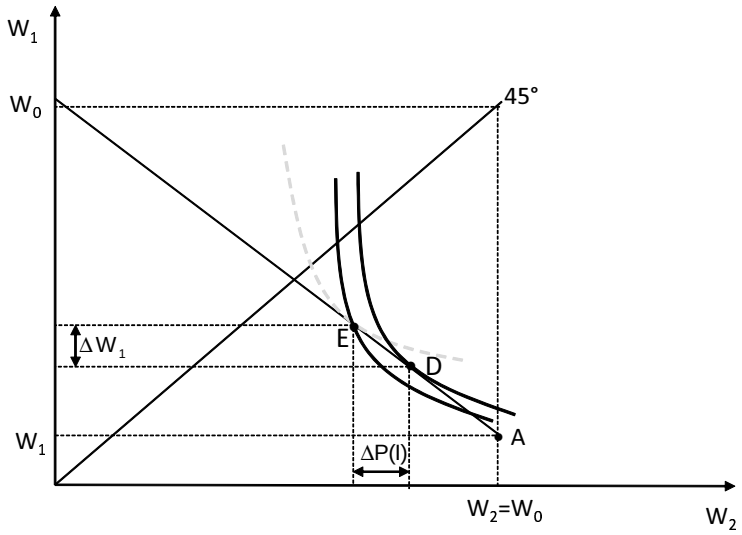

Figure 2.4: Compensation in case of an overestimation of loss probabilities

2.4 Examples

The last section discusses the interdependency of legal obligations and economic variables as well as possibilities to compensate consumers. So far, the analysis bases upon general examples without any link to specific insurance policies. This section, on the contrary, will discuss the ideal behavior of intermediaries on the basis of selected prevalent insurances.

2.4.1 Household Contents Insurance

A household contents insurance covers personal belongings against losses and ranks among the predominantly taken out insurance policies in Germany (Allensbacher Werbeträger-Analyse, 2011, p.55). It compensates the replacement value of the household elements. Therefore, the insured sum is based upon the amount which is needed to replace the whole contents. Despite the wide distribution of that kind of insurance coverage, consumers tend to underestimate the amount of a possible loss. That mistake is of serious consequence. An insurer who discovers the underinsurance of a client will often settle claims only proportionally even if the sum insured is not reached.

This case can be analyzed within the economic model of insurance demand: First, the total wealth of a consumer has to be decomposed into financial assets on the one hand,

and into physical property on the other hand, whereas the latter contains the insurable household elements. In the event of a loss, it is the value of the physical property that matters. Again, the starting point will be a situation without any mistakes. In Figure 2.5, the endowment point A depicts the total wealth level W_0 on the abscissa and the wealth level of all assets but the value of the household contents on the ordinate. At a given loss probability ρ, it is optimal to choose wealth levels corresponding to point D, as represented. Considering a fair premium, it is optimal to take out full insurance coverage. However, a consumer who underestimates the value of his personal

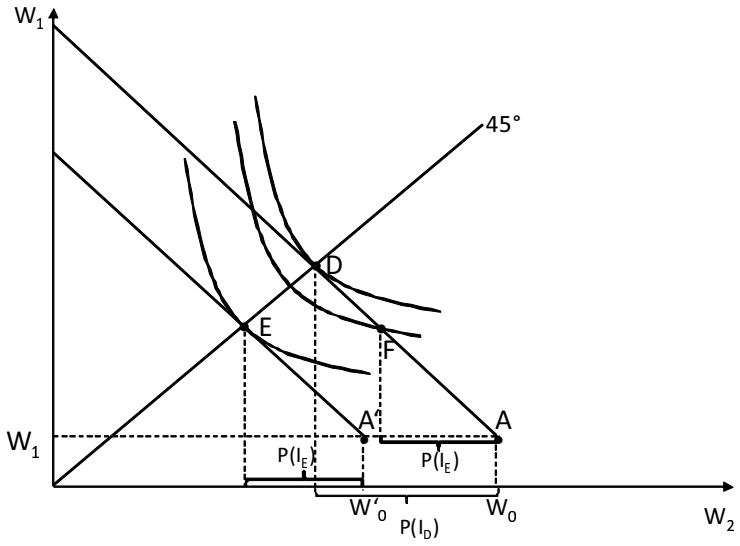

Figure 2.5: Underestimation of a potential loss

belongings misjudges the amount of the physical property. Hence, the total wealth is underestimated. Consequently, the insurance line shifts inward and the consumer considers A' instead of A as the relevant endowment point. Also, the insurer calculates the premium according to the wrongly estimated and also requested loss amount. Finally, the consumer considers himself to face a wealth level in each state according to point E as well as a corresponding level of expected utility. But, the premium payment ($P(I_E)$) actually only yields point F in Figure 2.5, hence, a situation in which the consumer is underinsured. Since the resulting α in F is too low compared with the full coverage, the consumer faces a loss in terms of expected utility as shown.

How should an intermediary influence the stated insurance demand decision? What actions and counseling activities can be expected? Since the underestimation results from a wrong evaluation of the existing values, an insurance agent is expected to either determine the approximately right value of the personal belongings by precise and specific questions or to gather the information by himself during a visit to the consumer's house. The alternative is to agree upon a waiver of underinsurance. In this case, the

calculations are based upon a predetermined amount insured per square meter [9]. Both alternatives are suitable actions in order to avoid the mistake of an underestimation of the potential loss. But, the calculation based on the amount per square meter might induce overinsurance if the insurable household content is less that EUR 650 per square meter. So, one problem is fixed but another one arises. An intermediary, who fails to verify the potential loss amount, and, if necessary, fails to correct the initial estimations, neglects his duty to inquire all relevant information. Also, by applying the diligence criterion for businessman, an intermediary acts carelessly if he does not double-check the possibility of an underinsurance because he should be aware of those commonly made mistakes. Thus, the intermediary is liable for the resulting damages.

2.4.2 Occupational Disability Insurance

Disability insurance maintains the livelihood in the case of an inability to work as a result of an accident or illness. In 2011, one in four employed persons held a disability insurance policy (Allensbacher Werbeträger-Analyse, 2011, p.55) whereas the remaining 75% insure that risk either differently (such as via saving accounts), or not at all. In fact, consumer protection organizations state that consumers tend to underestimate the risk of an occupational disability, which is in line with the findings of representative studies on behalf of large insurance companies (Continentale Lebensversicherung AG, 2011; Birkner, 2012).

In contrast to the previous example, an underestimation of the loss probability will result in too little insurance, if one follows the economic analysis. Figure 2.6 depicts graphically the effects of the stated underestimation. Still, the points A and D represent the endowment point respectively the ideal insurance demand decision given the economic determinants. An underestimation will increase the absolute value of the slope of the indifference curve. The case of a loss becomes more unlikely, and therefore the consumer is not willing to give up as much wealth in the no-loss state to gain wealth in the loss state compared with a situation in which the estimation is unbiased. Given the wrong estimation, point E in Figure 2.6 is the optimal choice. But, as the α is too low compared to the true optimum, the consumer does not maximize the expected utility in E. In the case of occupational disability insurance policies, an insurance agent should inform the consumer about the actual probability of loss occurrence since the underestimation seems to be a common mistake. However, Birkner (2012) states that consumers misconceive the causes of the inabilities to work. Whereas mental disorders constitute the main cause of occupational disabilities (41%, Deutsche Rentenversicherung (2012)), consumers consider problems with the musculoskeletal system to be predominant, followed by accidents. Hence, consumers underestimate their individual probability of the risk mainly because they misjudge the causes. Thus, consumers might find it reasonable to substitute occupational disability insurance by an accident insurance since the

[9] At the moment, this amount is around 650 EUR per square meter.

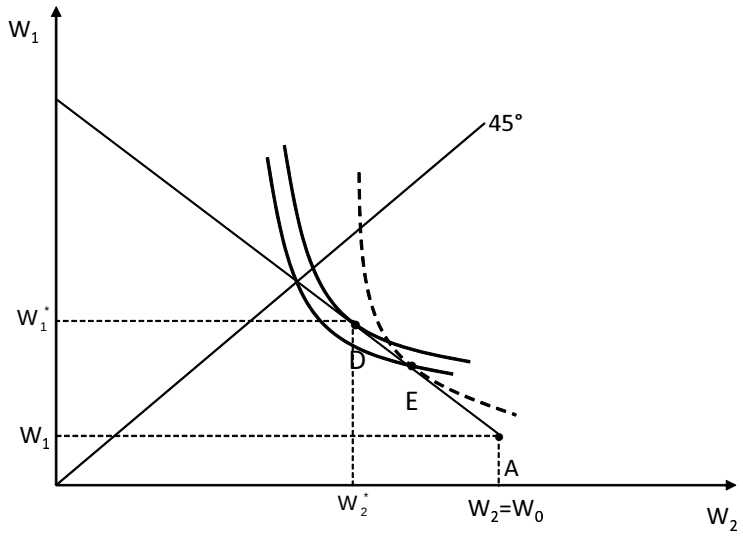

Figure 2.6: Underestimation of the loss probability

premium for the latter usually is lower. From an economic point of view, the consumers not only misjudge the probabilities of the possible states of the world, they are also not aware of them. Additionally, consumers lack knowledge about possible substitutes respectively about the loss of coverage which comes along with an assumed alternative. In this case, the insurance agent has to inform the consumer about different types of more or less substitutable contracts (duty to inform), and about potential misjudgments that have to be corrected based upon objective facts (duty to inquire all relevant factors).
In contrast to the previous example, the case of the occupational disability insurance shows that the consumer not only faces an insurance demand decision in terms of the degree of coverage, i.e. the α, but also faces a selection problem as far as differentiated but still substitutable products are concerned. Only if the consumer has information about the monetary consequences in each possible state with regard to perhaps slightly differentiated products and the corresponding loss probabilities, he is able to evaluate the expected utilities and finally pick the contract that is optimal given the individual degree of risk aversion. Thus, the intermediaries' task is to enable that choice by supplying objective and complete information. Stated differently, an insurance intermediary who provides selected information only and thus indirectly pushes the consumer to take out a certain policy is liable for the given advice and potentially has to compensate a resulting loss.

2.4.3 Legal Protection Insurance

The legal protection insurance basically covers the costs and expenses of legal proceedings and can be found in about 25% of German households (Allensbacher Werbeträger-

Analyse, 2011, p.55). A legal protection insurance policy can refer to single fields of law, but it is also possible to choose a combination of different fields within a single contract. Usually, legal protection insurance pays for legal proceedings after a waiting period of three months. However, each insurer provides a list of cases that are not insured, for example the risk in connection with building projects including its funding or disputes concerning family affairs.

In order to solve the insurance demand decision problem, a consumer needs to know which fields of law are relevant for his single situation. Stated economically, the consumer has to be aware of all potentially relevant states of the world and their probabilities of occurrence. Next, excluded cases of each insurance policy have to be systematically evaluated concerning their relevance for the individual. Additionally, the consumer has to compare the premiums of single policies that refer to single fields of law to those products which already combine different aspects. It might be the case that a combination of policies from the same insurer is cheaper than single components or vice versa[10] which should be noticed since the premium directly affects the consumers' expected utility as shown in Figure 2.7. Assume the case of VGH Insurance where the combination is cheaper than the single policies. Why might this be the case? Insurance companies have to cover administrative expenses and ensure liquidity. By charging safety loadings, those costs are covered (Zweifel and Eisen, 2003, p.91). It seems quite reasonable that administrative costs are lower if a consumer buys one contract only. Thus, the loading should be less in the case of a combined product. Figure 2.7 compares the different alternatives. A loading of $\lambda = 0.2$ indicates a small increase in payments compared to the fair premium. As the loading increases, the insurance line flattens out. Thus, the lower the loading is the higher is the coverage. In the stated example, the coverage is higher in point E than in D. Now, if both alternatives cover the same fields of legal protection insurance, a consumer should select the cheaper contract. In figure 2.7 it can be easily seen that if the consumer buys the contract with the high loading he can afford point D by paying premium $P(I)$. If he buys the cheaper alternative he can afford more coverage (F) even though he pays the same premium. Stated differently, by paying less the consumer can afford the same wealth level in the loss state. An insurance agent has to point out possible policies in the field of legal protection insurances and has to inform about differences in the premiums of identical products which might result from combinations. Additionally, he has to discover which states of the world seem relevant for the individual consumer in order to prevent an overestimation of the specific loss probabilities. If the potential insurant neither owns a car, nor is in possession of a driver's license, legal protection concerning traffic issues might be neglected because a legal dispute is unlikely. An other example might be that a consumer who lives in his own house, does not primarily need legal protection in the case of conflicts between

[10]For example: Combinations of legal protection in the fields private and traffic. VGH Insurance: The combination is 7.5% cheaper than single policies (www.vgh.de). Advocard Insurance: The combination is 13.3% more expensive than two single policies (www.advocard.de).

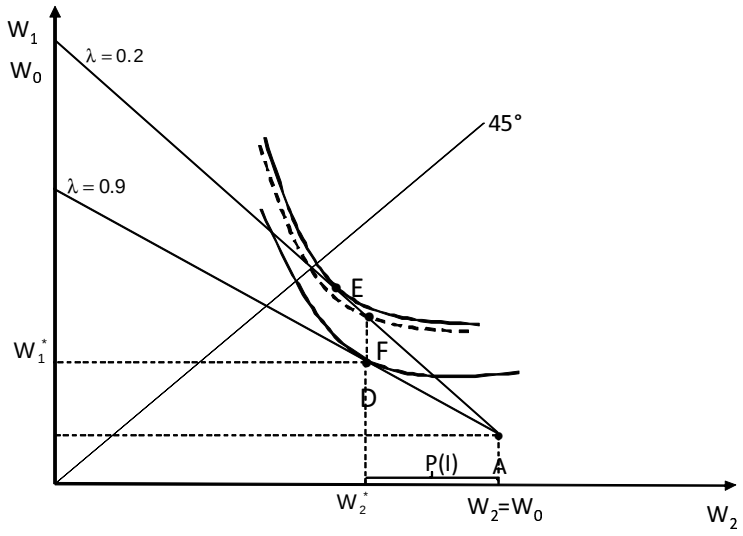

Figure 2.7: Differences in premiums

tenant and owner.

2.4.4 Discussion

Consumers make mistakes while taking out insurance policies. Shapira and Venezia (2008) basically state that consumers buy too much insurance and also Mossin (1968) argues that individuals take out full coverage instead of partial coverage. Even though one can imagine such mistakes result from overestimation of loss probabilities, or even an overestimation of the potential loss, the given examples state also situations in which the insurance coverage is too low. However, the effect is comparable: an other than the optimal choice results in utility losses.

The existing remuneration scheme in Germany rewards the sale of insurance policies, whereas the amount of that payment might also depend on the premium rate paid by the consumer (Beenken, 2011). On the one hand, if only the commissions matter for insurance agents, underinsurance should not be a problem since the agent always has an incentive to sell more insurance than the consumer initially demands. Nevertheless, to analyze a consumer's situation requires effort and is therefore costly from an intermediaries' point of view. Without the possibility to monitor the intermediaries' work, the incentive to spend only little effort on counseling activities is high as predicted by the principal-agent theory. On the other hand, there is no incentive to sell less than the demanded coverage in the case of overinsurance. Additionally, a third aspect emerges. Since some of the products are differentiated but still partially substitutable, the consumer faces a selection problem. Consider for instance term versus endowment life insurances.

The design of the liability rule has to consider both overinsurance and underinsurance as well as selection issues. Therefore, the diligence level of each duty has to be set appropriately. Neither an overload of diligence, nor too low requirements are efficient. On the one hand, information that is easily available has to be collected and considered while giving advice. On the other hand, the information should only be acquired and kept in mind by the intermediary if the consumer cannot collect and consider that information cheaper. However, the insurance agent has expert knowledge and therefore is usually considered to collect information at lower costs than the consumer. That necessary expertise, on the contrary, results in a rather weak self-information responsibility on consumers (Curti, 2005, p.211), and a more severe obligation on the intermediaries' part. The examples show that the complexity and, thus, the demand for information and advice differ according to the insurance policy which has to be considered when defining and applying a certain diligence level.

2.5 Conclusion

How should intermediaries influence the insurance demand decision? The answer to that question has to refer to the interdependency of economic determinants and legal duties. Intermediaries have the possibility to guide the demand decision by delivering objective information on the one hand, and by considering the individuals' situation and economic circumstances on the other hand. The economic theory provides determinants that are essential for the insurance demand decision. Undoubtedly, consumers lack information about certain variables and, therefore, misjudge their demand for insurances. So, an intermediaries' task is to discover that misjudgment and to provide the right information. Since the information in the insurance market is asymmetrically distributed, an insurance agent has an incentive to behave opportunistically because the provision of information is costly. That tendency is reinforced by the remuneration scheme in Germany.

Insurance intermediaries are regulated by law. Among other things, the law states basically four obligations and a liability rule to sanction any violations. In order to interpret and substantiate the legal terms, they have to match the relevant economic determinants to state the ideal behavior of an intermediary. The theoretical examples show that the counseling activity necessarily varies between different products. Whereas, an intermediary has to fix overestimations or underestimations of probabilities, or potential loss amounts in some cases, he has to deal with selection problems in others. The liability rule is supposed to ensure that the intermediary provides the right information in each of the cases at the individual level. Since the diligence standard is at least comparable to the one a prudent businessman has to meet, an insurance agent is liable for acting carelessly which assumes that a risk was noticed, but still ignored at the time the counseling took place. To sum up, the diligence standard formulated by the law has to be applied to the specific economic determinants of insurance demand which are

within the intermediaries' sphere of influence. For this purpose, the combination of legal obligations and economic variable can be used as a checklist to cover all relevant aspects of an ideal counseling interview. Now, let's return to the introductory cases and court decisions and take all economic factors and their legal counterparts into consideration.

The first case dealt with an automobile insurance for a used RV that was partially financed by credit. The question is how an ideal counseling interview could have influenced the insurance demand decision? First, the intermediary has to base the advice upon a sufficient number of contract alternatives to provide the consumer with a set of possible actions. In this case, the intermediary should inform about the different alternatives, i.e. part vs. comprehensive insurance coverage as well as the resulting premium differentials. Being an expert, the intermediary knows the relevant differences and can easily determine the premiums. Second, all relevant factors have to be inquired. Since the RV is partially financed, the need for a comprehensive coverage should be put into question as well as the objective amount in the case of a constructive total loss since the insurance should reduce the financial risk of the credit repayment in the loss state. The relevant information was available because the consumer mentioned the credit during the counseling interview. Depending on the individual financial situation of the consumer - the new RV was paid for by turning in an old car and an old RV in addition to the downpayment - the intermediary should have at least offered the comprehensive full coverage. As far as the documentation is concerned, it has to be stated that in the case of financing via credit, a comprehensive coverage reduces the financial risk of loan repayment in several events whereas part insurance covers only certain occurrences.

In the second case, a residential building insurance, a water pipe burst, but the resulting damage was not part of the insurance coverage. Which information should have ideally been provided by the intermediary? In this case the consumer was interested in an update of the insurance conditions and an adjustment of the sum insured. Thus, the insurance agent has to inform about all possible contract alternatives that are within his portfolio and can serve as an alternative to the current contract. Also, the main differences should be stated. Since the consumer explicitly mentioned the water pipes and the swimming pool in the backyard, the intermediary has to refer to the corresponding policy details and has to fix the incorrect assumptions about the enclosure of certain water pipes. Even though the pipes might have not been part of any policy, the old and the new one, the consumer obviously could not distinguish between fresh water and drain pipes. Whereas the fresh water pipes are included, the drain pipes are not. This differentiation should have been part of the counseling interview as well as the note that the new insurance conditions do not differ from the old ones concerning this aspect. The advice should have been to switch from the current to the new conditions as long as the consumer is better off. With regard to the drain pipes, the intermediary has to state that, so far, those are not included. That information gives the consumer the opportunity to take reasonable precautions. In fact, some insurers offer supplementary insurances concerning drain pipes and the intermediary should provide or at least mention those offers. The documentation should elucidate about enclosures and exclusions

from insurance coverage as well as the differences of the two tariffs. If an additional contract was part of the counseling interview, the documentation has to refer to that information as well, even if the consumer did not accept it.

Finally, in the last case, the consumer not only switched to a new tariff but changed insurance companies as well. None of the accumulated old-age reserves could be transferred. Additionally, the patient-centered care differed in some aspects. The intermediary established the initial contact by offering an alternative to the existing policy. Nevertheless, he still owes advice that is based upon a sufficient number of contracts. Therefore, he should state the advantages and disadvantages of every alternative in order to present the whole set of possible actions. Concerning the wishes and needs of the customer, the new policy conditions should at least be equal to the existing ones (chief physician, single room, private ward). In the case of a setback, the insurance agent has to evaluate if the consumer accepts this - perhaps in exchange for a different, higher valued benefit. Additionally, the intermediary has to calculate the transferable amount of the old-age reserves and has to inform about resulting consequences of the non-transferable part. In this case, the lower premium of the new policy cannot offset the loss of the old-age reserves and the resulting consequences for the premium development once the consumer retires. Thus, the insurance intermediary should advise against any change. The documentation has to state that any change will result in a financial loss.

Law versus economics? Actually, the chapter demonstrates that both aspects complement one another. Whereas the theory of insurance economics focuses on relevant and necessary determinants that have to be known in order to solve the decision-making problem, the insurance law provides the legal instrument to force the parties to reveal private information. Still, some aspects remain unanswered. As soon as insurance policies are assumed to be heterogeneous and perhaps represent substitutes, the decision-making problem no longer refers to the optimal determination of coverage only, but also states a selection problem a consumer has to deal with. Another aspect refers to the provided information. Recall the example of the household contents insurance. A consumer underestimates his physical capital. The intermediaries' advice is to agree upon a waiver of underinsurance which yields a way too high insurance amount, and as a result to a premium that is too costly. The intermediary solved the problem of underinsurance, but at the same time, a different mistake happened. Was the advice right or wrong?

3 Miscounseling in the German Insurance Market - Utility-Orientated Implications for the Meaning of Miscounseling

3.1 Introduction

Consumers are often uninformed about certain products and their characteristics. This is obviously true for insurance products since consumers have difficulty matching their needs and preferences with the characteristics of the products and have to rely upon expert know-how. Survey data provided by Insurance Europe (Insurance Europe, 2012, 2013) states that insurance products in Europe are distributed via different channels. Aside from direct writing, insurances are sold by banks or lending institutions as well as by traditional intermediaries (brokers and agents), whereas the market shares differ by the country and the class of insurance. In the case of Germany, insurance products are predominantly sold by traditional agents[1].

The economic task of an intermediary is to reduce the informational asymmetries between the insured and the insurer. However, the relationship between the consumer and the intermediary is also characterized by imperfections which might induce miscounseling and produce welfare effects. For that reason, the European Union adopted directive 2002/92/EG, which was implemented into German law in 2006 and came into effect in May 2007. The act amending the Insurance Mediation Act (VersVermG)[2] obligates the insurance agents to obtain a commercial trade license which is issued by the Chamber of Industry and Commerce. Additionally, each agent has to be registered with the chamber as well, and entered in the Insurance Intermediary Register, which is available online[3].

[1] Distribution of life insurance premiums by distribution channel in Germany (2010): Direct writing 2.6%, Agent 48.3%, Broker 23.2%, Bancassurance 23.6%, other 2.3%. Distribution of non-life insurance premiums by distribution channel in Germany (2010): Direct writing 4.2%, Agent 60.9%, Broker 25%, Bancassurance 6.1%, other 3.7%.

[2] Act amending the Insurance Mediation Act (Gesetz zur Neuregelung des Versicherungsvermittlerrechts (VersVermG)) December 19, 2006 (Federal Law Gazette Part I, page 3232) becoming effective on 05/22/2007.

[3] http://www.vermittlerregister.info

Furthermore, the Insurance Contract Act (VVG)[4] imposes a fault-based liability on the agents, § 63 VVG, whenever advisory obligations, § 61 VVG, are not met.
"If the difficulty of assessing the insurance being offered or the person wishing to take out insurance himself and his situation gives occasion thereto, the insurance intermediary must ask the person [...] *about his wishes and needs and* [...] *must advise* [...] *and state reasons for each piece of advice given in respect of a particular insurance.*[...]*"* [§ 61 VVG].

Those rather vague legal terms have to be interpreted by the judicial system. By defining a diligence level, the judicial system influences the behavior of the agents. The liability rule changes the cost structures because it forces the intermediary to internalize expected damages that result from miscounseling. Without any failures or court errors, law and economics literature suggests that it is optimal for any rational individual to select the defined due care level because the individual costs approach their minimum. If the level is appropriate, the individual and the collective rationality can be harmonized by the liability rule (Wätzold, 1998, p.163) which maximizes social welfare. The main question is whether the activities of the intermediary, i.e. the advice given and the information provided, enable a choice that improves the consumers' situation. If the consumer is uninformed about insurance products and their characteristics their choice might differ when considering additional information that reveals the actual choice set. Hence, the choice of the consumers as well as the behavior of the intermediaries, given certain market conditions, has to be analyzed. To get an idea of counseling situations in general and to identify relevant variables and issues, I conducted several interviews with consumers of insurance. Without stating all the results in detail, the interviews suggested that it is always a matter of not considering relevant information that yields dissatisfaction from the consumers' point of view. According to traditional economic insurance demand theory, a consumer has good knowledge about possible states of nature and their occurrence as well as the different possible actions in order to choose the alternative which yields the maximum expected utility (Zweifel and Eisen, 2012, p.75)[5]. If one drops the assumptions that a consumer has information about possible actions and has the ability to identify the relevant states of nature, the individual is unable to calculate each consequence, and thus the basic demand theory fails. According to Maas (2010) an insurance agent has to fulfill different functions. In the context of this chapter, two of the stated functions seem relevant: first, the information function and, second, the market maker function. Both functions assign an information duty to the

[4] Insurance Contract Act (Versicherungsvertragsgesetz (VVG)) November 23, 2007 (Federal Law Gazette Part I, page 2631), becoming effective on 01/01/2008; last changes 27.07.2011 (Federal Law Gazette Part I, page 1600) with effect from 08/04/2011.

[5] Those assumptions deviate from the construction of an average consumer whose decisions are driven by the consideration of reasonable states. The average consumer ("reasonably well- informed and reasonably observant and circumspect" (European Commission, 2006)) is often used as a benchmark in court decisions (Carse and Padfield, 2012). I would like to thank the anonymous referee for pointing this difference out.

intermediary in order to enable the consumer to make a choice.

There is a wide range of literature related to insurance markets and especially insurance agents. For example Eckhardt and Räthke-Döppner (2008), who describe intermediation within a search model and answers the "make-or-buy" decision but also Focht (2009), who analyzes the impact of intermediaries on market structures. The topic of miscounseling can be found in articles by Hofmann and Nell (2011), Focht et al. (2013), and Schiller (2008). Those papers basically answer, considering welfare aspects, the question of which remuneration system, fee-for-advice or commissions, should be adopted. Hofmann and Nell (2011) and Focht et al. (2013) use a framework that allows for product differentiation. The economic model presented in this chapter accounts for the fact that an advice changes the decision-making situation for a consumer. The model uses the idea of representing heterogeneous products in spatial relationships and to use distances to analyze similar but still different contracts, as suggested by Hotelling (1929) or Salop (1979). I will analyze the relationship between consumer and intermediary using the theory of the consumer as in Lancaster (1991) to identify an ideal contract. Additionally, I am going to introduce the different cost structures which are typical of present market conditions. As a result, an information-based definition of miscounseling can be stated by using a utility orientated mismatch approach. Therefore, a benchmark has to be defined in order to distinguish between situations in which the advice improved the consumers' choice and situations in which the advice was misleading. So far, miscounseling has consisted of selling the wrong contract without any further definition or differentiation. By developing a more information-based definition, one can distinguish between miscounseling on the one hand and not matching the consumer with the ideal contract on the other hand. Hence, the chapter contributes to the gap which arises from the open terms used to define intermediaries' legal obligations and the fact that advices might tend in the right direction but, still, do not lead to an ideal match of product and preferences. The economic mismatch approach can also be connected to the concept of the "average consumer" that emerged in the theory of law in order to determine unfair commercial practices. While courts have to "exercise their own judgment"(European Commission, 2006, p.11) to assess the reaction of an average consumer in a case of unfair practice, the mismatch approach considers the differences in utility of a representative individual with respect to insurance demand decisions when one provides additional information (accurate or not) on heterogeneous products.

Dealing with the provision of information, one has to discuss consumers' insurance literacy and their potential limited ability to process additional information in the context of the model. Whereas the information paradigm suggests that consumers are able, willing and competent to deal with that information (Micklitz et al., 2011), Grundmann (2002) states that additional information can only be efficiency enhancing if that information is relevant and the person is able to process it. Otherwise, consumers' make poor choices (Tennyson, 2010). Tennyson (2011) gives an overview about several studies concerning consumers' insurance knowledge. A possible explanation for lacking knowledge and decision-making skills seems to be the fact that consumers' might be rational

decision makers but face cognitive limitations. However, de Meza et al. (2010) find that "to a considerable extent, consumers of financial products believe what they are told. They are trusting." If they respond to the advice as suggested by de Meza et al. (2010) the cognitive limitations concerning the insurance demand decisions might be overlain by the trust in the expert knowledge. For that reason, the model only copes with the provision of information but not with limitations consumers' face concerning information processing.

The present chapter is organized as follows: Section 3.2 introduces four cases which are briefly described and discussed. In Section 3.3, the model framework as well as the parameters of miscounseling are presented. Furthermore, in subsection 3.3.3, I suggest a rewording of § 61 VVG that evolves from the insights of the present theoretical work. Finally, Section 3.4 concludes.

3.2 Cases

In this section, I would like to introduce several cases to emphasize the matter of miscounseling in the insurance market. The production of insurance coverage involves three different parties. First, the insured, who is willing to pay for the coverage. Second, the insurer, that provides several products with different alternatives, and last, the agent, who is able to match supply and demand. The interaction of all market participants itself seems to be a highly complex structure, even if we do not take the complexity of the products into account. Therefore, I use cases to point out several interactions between individuals and their relationships. Case studies are an alternative approach to describing and analyzing the complexity of "real-life events" (Yin, 2006, p.2) even if the researcher can only observe the final results of the interactions but has no chance to control or manipulate single actions (Yin, 2006, p.5). In this context, cases seem to be a reasonable way to gather information about the relevant aspects of the consumer–intermediary relationship.

3.2.1 Methodology

Prior to the presentation of the cases and their results, the procedure of how the information was gathered should be mentioned. The aim of the cases is to show the interaction between consumers, i.e., households, and intermediaries, i.e., insurance agents. Therefore, I was looking for cases in which the consumers were dissatisfied with the agent's work in order to analyze the preceding counseling situation. Of course, the German insurance industry counts millions of insurance contracts (Gesamtverband der Deutschen Versicherungswirtschaft e. V, 2012, p.4). However, cold calling seems to be inappropriate in order to select cases of potential miscounseling because of practical reasons and privacy protection issues. A cooperation with the Consumer Center in Hamburg enabled a preselection of 18 cases based upon a desk-review of available files and docu-

ments. Since the Consumer Center receives many complaints regarding insurances and insurance intermediaries from all over Germany that database seemed to be promising. Due to the cooperation, the privacy protection problem could be solved. Nevertheless, it was only possible to contact those consumers that responded positively and agreed to face-to-face interviews. Out of the 18 preselected cases, four consumers agreed to interviews that were held in September 2011[6]. The interviews are problem centered, i.e. semi-structured (Kurz et al., 2007). Each interview followed the same interview guidelines as far as sociodemographic facts and attitudes towards risk aversion are concerned. The second part was rather narrative but still partially guided to keep the focus upon the problem of miscounseling. As recommended by Witzel (2000) the interviews were recorded to secure a correct and complete analysis. Each interview was conducted in the consumer's house and lasted up to 60 minutes.

First, some general data about education, marital status and risk attitudes was collected. The latter, the willingness to take risks, was measured by using two risk related questions from the German Socio-Economic Panel (GSOEP)[7] since those have been validated in experimental studies, for example by Dohmen et al. (2005), who also find that context-specific questions add value to generalized questions. Therefore, all individuals were asked to assess their willingness to "take risks in general" on an 11-point scale in which zero signifies no willingness to take risks and ten describes risk-loving behavior. Additionally, the individuals stated their risk attitudes in financial matters. For that reason, they were asked to imagine a situation in which they had won 100,000 EUR in the lottery and had to decide whether to accept or reject an offered investment opportunity with the following conditions: there is the chance to double the money within two years but it is equally possible to lose half of the amount invested. The consumers were asked what share of their lottery winnings they would be prepared to invest in this financially risky, yet lucrative investment. They could choose between shares of 100,000 EUR, 80,000 EUR, 60,000 EUR, 40,000 EUR, 20,000 EUR, or reject the offer and keep the lottery winnings.

Also, each individual was asked to grade their own expertise in insurance matters, using the grades 1 to 6, which correspond to the grades used in schools. Furthermore, information was requested about prior experience with insurance in general. Finally, the individuals were asked to refer to the counseling situation itself. This part of the interview was rather narrative, and only sometimes disrupted by comprehensive questions or clarifying statements. All consumers put the relevant correspondence at my disposal, i.e., documentation, letters, and insurance policies. The use of extra documents follows the idea to analyze data which has not been created by the researcher themselves (Mayring, 2002, p.47). Hence, the following descriptions and results are based upon the interviews on the one hand and upon these documents on the other hand.

[6] Kurz et al. (2007) state it is not possible to determine the necessary number of interviews by statistical means. However, four are hardly enough to cover all relevant aspects of a counseling situation but, still, it is possible to describe commonalities and differences.

[7] The questions can be found, e.g., in the GSOEP individual question form of 2004.

3.2.2 Case Descriptions

The following section presents the single cases. All interviews contain rather general information about the persons as well as detailed reports about their counseling experiences. I will first present the sociodemographic facts, experience with insurance and claim settlements, self-assessments about their knowledge in insurance matters, and risk tolerance, followed by reports of each individual.

Case 1

Sex	female
Age	74
Education	Secondary School (German "Realschule")
Marital status	married
Expertise in insurance matters	low-medium
Risk tolerance	general: risk neutral (6); financial situations: risk averse (0 EUR)

Table 3.1: Case 1

The first contact was established through a call-center and the question of whether the consumer was conversant with recent changes in nursing care insurance including all possible benefits in a nursing case. In order to preclude the possibility of false or incomplete information, the consumer agreed to a consultation with an insurance agent. In the conversation with the tied agent, the consumer realized that all relevant information about nursing care insurance was known since her husband was suffering from Alzheimer's disease and already needed nursing care. Because of the personal concern that had already lasted for some time, the consumer was well informed and had already taken out the relevant insurance policies. Nevertheless, the agent presented her an insurance product which pays a monthly pension in case of invalidity and, therefore, represents an add-on to governmental nursing care. While presenting the product, the agent neither used the term casualty insurance nor stated that the event of damage has to be an accident. The presented record about the consultation states that the customer demanded information about the specific product presented. Additionally, the documentation writes down the non-existence of insurance coverage in the fields of nursing care and casualty insurance. Furthermore, it is recommended to take out the presented policy. Also, the agent emphasized the possibility of revoking the contract within two weeks. As a result, the consumer signed the contract. Noticing that the contract covered nursing care events resulting from an accident, the consumer tried to revoke the contract and finally succeeded. It turned out to be difficult to revoke the contract because neither the agency nor the insurer responded within the legal two

weeks' time limit. Only the threat of contacting the Consumer Center and the media led to a successful revocation.

Case 2

Sex	male
Age	62
Education	University degree
Marital status	married
Expertise in insurance matters	medium
Risk tolerance	general: risk neutral/loving (7); financial situations: risk averse (max. 40,000 EUR)

Table 3.2: Case 2

Legal protection insurance had already existed for over 30 years. Undoubtedly, it was appropriate to consider a revision of the contract and possibly vary the conditions due to changes in the insureds' situation. For that reason, the insured followed a request of his insurer and demanded a checkup. As a consequence, he was contacted by an insurance broker who sent an offer to change the existing contract. Since the consumer did not know that his contract was managed by an insurance broker, he did not respond. Finally, the broker called and explained that the documents sent suggest an alternative policy which he recommended to switch to in order to benefit from additional services such as mediations or the possibility of contacting a lawyer while staying in the hospital. Due to the additional services, the premium would increase by 68 EUR p.a. and a deductible of 200 EUR would become necessary. While the existing contract included legal protection in employment related issues, the new offer excluded those matters. Even though the recent conditions include legal protection insurance in employment matters, the documentation of the phone call declares "the consumer is aware of the non-existence of legal protection" in this field. Additionally, the broker sent a contract of brokerage because the agency did not have a legal mandate by the time of consultation. The consumer refused to sign either document and, therefore, kept the contract conditions as before.

Case 3

In this case, the consumer took out two insurance policies on behalf of her children with the intention of funding their future, especially their education and higher education. The agent presented an insurance policy that had been designed for children and stated that this product could serve as an educational endowment insurance. Reaching a certain age, the contract would be transferred to the child and would from there on serve as a

Sex	female
Age	34
Education	University degree
Marital status	married
Expertise in insurance matters	medium-good
Risk tolerance	general: risk neutral(6); financial situations: risk averse (max. 20,000 EUR)

Table 3.3: Case 3

life insurance policy. Additionally, it was supposed to be possible to withdraw money at any time. Several years after the first consultation, the consumer had her insurance policies checked once again by another agent. As a result, she realized that the policy was a unit-linked pension insurance scheme. Consequently, it did not seem advisable to withdraw money and furthermore, due to the way the contract was designed, it was not even possible to do so. Realizing that, the insured tried to change the insurance contract into a noncontributory policy. In order for this to be done, contracts need to show a sufficient surrender value, but neither of the accounts displayed, six, respectively, five years after the signing of the contract, any value at all. This was due to the fact that all costs, including administrative costs as well as commissions, were covered by the first payments. Apparently, the insured was neither familiar with this standard procedure nor had any idea about the amount that had to be covered. So, since the contracts could not be changed into noncontributory policies, she decided to continue the payments.

Case 4

Sex	male
Age	68
Education	Secondary School (German "Realschule")
Marital status	married
Expertise in insurance matters	medium-good
Risk tolerance	general: risk neutral (5); financial situations: risk averse (max. 20,000 EUR)

Table 3.4: Case 4

The consumer had to take out a life insurance policy in order to obtain a home loan. Since he repaid the loan without any complications, he canceled the insurance contract

early and received its surrender value. Due to the premature dismissal, he lost a certain amount of money (about 20,000 EUR). For this reason the intermediary contacted the consumer again and suggested a possible chance of compensating the suffered losses. The basic agreement was as follows: the consumer should pay an amount of 7,500 EUR and after two years the surrender value would cover the suffered losses. The agent recommended taking out two unit-linked pension insurance schemes and to pay the whole premium amount needed at once. As a result of the consultation, the insured paid approximately 7,500 EUR into a deposit account. After receiving the policies, the insured wondered about the contractual agreements, but the insurance agent assured him that everything was stated as agreed, respectively, had to be stated that way because of fiscal reasons. Nevertheless, after two years the insured received a payment reminder and finally the information that the two policies had been taken out till the age of 85. Consequently, the insured canceled both policies and, again, lost money.

3.2.3 Discussion

Even though the cases are very different, it is possible to identify similarities and differences. First, the attitudes towards risk can be discussed. Recall that the information was gathered via two questions: risk tolerance in general and risk attitudes in financial matters. The answers to the rather general question ranged from 5 to 7 and, therefore, the individuals can be seen as being from risk neutral to slightly risk loving. Nearly the opposite conclusion can be drawn from the context-specific question, since the highest amount that an individual was prepared to invest was 40,000 EUR, which indicates risk aversion rather than risk neutrality. Both the answers to the general as well as the answers to the context-specific questions closely correspond to the distributions found by the GSOEP. Obviously, persons that are confronted with financial decisions behave as risk averse, even if they state that they take chances in other situations.

Next, I will discuss how experienced the consumers are with insurance and how they assess their own knowledge. To start with the latter, basically all the responded with "satisfactory", when they were asked to grade themselves. Two gave the range "good to satisfactory" and one graded herself "satisfactory to sufficient". All owned several insurance policies and each individual already had to handle at least one claim. Thus, it can be stated that each consumer already had experience in the field of insurance but did not consider themselves to be an expert. The resulting behavior is commonly known as limited buying behavior (Mayerhofer, 2009, p.35). Therefore, consumers tend to delegate the task of selecting the right insurance scheme to an intermediary, since they assign him higher competencies (Mayerhofer, 2009, p.28).

Last, the behavior ex ante and ex post the consultation can be compared. Ex ante considerations basically state the reasons why the individual agreed upon a consultation and the ex post reconsiderations give information about the cause of the complaint. In all cases, the initial contact was established by the intermediary or the insurer. Indeed, consumers tend to avoid unpleasant topics and, therefore, they do not demand insur-

ance coverage actively even if its consumption would increase utility (Ihle, 2006, p.33). However, confronted with potential risks, consumers start to form expectations about their own needs for the product and its characteristics. Thus, individuals try to match their preferences with the characteristics of the product in order to decide whether to buy the product at all, and, if they consider the product worth buying, how to design the contract. The cases indicate that consumers seem unable to perform the match properly. Hofmann and Nell (2011) suggests that consumers can neither cope with the complexity of insurance products nor are they able to gather all the relevant information at an acceptable cost. As a result, uncertainties arise, which add to the trend to delegate the buying decision. Ex post, i.e., after the consultation, the consumers apparently behaved very differently. Whereas three of them signed the contract (Cases 1, 3, and 4), one did not. Two of them reconsidered their choice after receiving the policy, but only one, the consumer in the nursing care case, actually revoked the signature within the legal cancellation period. The second insured, the unit-linked pension insurance case, canceled his contracts after two years. Only one insured realized the mismatch after an additional consultation with another intermediary, who pointed out what the insured characteristics were and how the money could or could not be withdrawn. Apparently, even though consumers might not be able to select the appropriate insurance contract themselves, once they receive additional information, e.g., in the form of additional documents, discussions with family or friends or another consultation, they undergo a learning process. As a result, consumers reconsider their initial choice. Mayerhofer (2009, p.24) gives an explanation of the post purchase behavior: the decision is doubted because several alternatives had been available but were not chosen in the end.

These insights lead to the tasks the intermediaries should perform. The intermediary is supposed to provide additional information so that the consumer is able to consider alternatives and finally sign the "right" contract. Thus, the intermediary's advice ideally enables the consumer to purchase a policy that best matches his preferences, and additionally, discloses the alternatives so that the opportunity costs can become known. As a result, the consumer can make an informed and rational choice. In Germany, the predominant part of the reward to the agents is via a commission system: the insured basically pays the commissions indirectly by the premium and the insurer forwards it to the agent. One has to differentiate between acquisition and renewal commissions. While acquisition commissions are paid whenever a new policy is taken out, renewal commissions refer to periodical payments that compensate for the potential services performed by the agent. Beenken (2011) finds that the amounts of both payments are closely correlated. Also, the agent faces a cancellation liability, hence, commissions have to be repaid whenever a consumer cancels the contract within a certain period of time. The commissions as well as the cancellation liabilities are subject to bilateral contracts between the insurer and the agent.

3.3 Model framework

In the following section, the insights from these cases are used to develop a theoretical model. The aim of the model is to identify the connections between the relevant variables and to understand the relationship between the intermediary and the consumer. Additionally, a definition of miscounseling will be stated.

3.3.1 Model Structure

The product concerned is the insurance policy, therefore, a conditional promise to make indemnification payments (Zweifel and Eisen, 2003, p.187). As a result, uncertainties about future events can be reduced because the insured knows the resulting wealth effect ex ante. Traditionally, the demand for insurance is modeled by using the expected utility approach. Since that approach accounts for different states of the world, either with or without losses, one can derive an optimal decision as far as the coverage of the loss is concerned. However, this choice only constitutes one step while taking out a policy. The second question a consumer has to answer is a selection decision and has to cope with the heterogeneity of consumers themselves and products. Zweifel and Eisen (2003) define the insurance contract as a conditional promise in a sense that it is conditional on several contract specifications which determine the payment in the case of an insured event. The difference between insurance contracts is underlined by Schlesinger and von der Schulenburg (1991) as well, who state that insurance products differ in several characteristics even though the contracts seem to be identical to consumers. Thus, since neither the insureds nor the products are homogeneous, the product characteristics and the preferences have to be matched. As a result, consumers have to be aware of the different actions and states of nature in order to perform that match properly. Zweifel and Eisen (2012, p.101) state that risk avoidance and risk reduction can be seen as possible alternatives to market insurances. Additionally, Ehrlich and Becker (1972) argue that self-insurance constitutes a substitute for insurance policies whenever no market insurance exists.

Focusing on insurance agents, it seems feasible to treat different but similar insurance contracts as possible actions a consumer can perform. Since insurance products are quite heterogeneous, each possible contract constitutes an alternative choice of which a consumer has to be aware. It is the function of the agent to present the information about the differences between the available contracts in order to enable an informed choice given several similar insurance policies. Even though the contracts might be quite similar, it has to be possible to identify a "right" contract for a specific consumer. Therefore, a consumer theory is needed which is able to account for differentiated goods within a utility optimizing framework. Additionally, the theory should cope with the flexibility of insurance products.

Consumer theory and behavior

The theory of the consumer exposited in Lancaster (1966) has the desired properties. Lancaster (1966) states that the consumption of the characteristics of goods generates utility instead of the consumption of goods. As a result, different products contain different ratios of preferred characteristics. Following Schlesinger and von der Schulenburg (1991), comparable insurance products differ in the proportions of their characteristics, thus, Lancaster's theory applies very well in this context. Assume the risk of future income: on the one hand, it might be desirable to secure the family income in a situation of an early death. On the other hand, a person might be interested in the own-consumption value in the case of longevity. Thus, the two characteristics are relevant: the sum insured in case of death and the sum insured in case of survival.

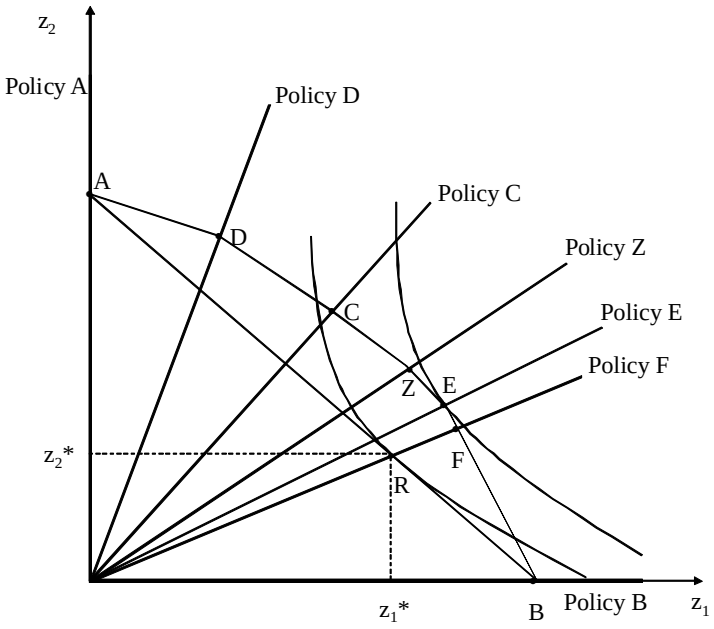

Figure 3.1: Example: Lancaster Model

For the purposes of this chapter, the features of the model can be illustrated by Figure 3.1. In the graph, the quantity of each characteristic is measured along the axes. Additionally, the figure contains several different policies, marked as policies A to F and Z. First, policies A and B consist of only one characteristic and, therefore, are referred to as "pure forms". Returning to the previous example, the relevant characteristics are "sum insured in case of death" (z_1) and "sum insured in case of survival" (z_2). A policy consisting only of characteristic z_1 is called term life insurance. A policy which focuses only on characteristic z_2 would be a pension insurance scheme. Considering budgets and prices, a consumer can afford only certain values of each policy. In Figure 3.1, prices and budget are assumed to be such that the consumer can purchase an amount A of policy A or an amount B of policy B if he spends all his money on either one contract.

Characteristics are assumed to be additive Lancaster (1991, p.53). Therefore, a combination of policies A and B can result in a combination of characteristics along the line segment $\overline{AB}$. Without any other contract alternatives, the segment $\overline{AB}$ forms the so-called efficiency frontier. Furthermore, a consumer has to pick a specific combination of characteristics, thus, a certain point on the frontier. The exact combination is determined by the consumer's preferences, which are assumed to fulfill the traditional assumptions and, as a result, the indifference curves slope downward with a diminishing marginal rate of substitution. Hence, in Figure 3.1 the optimal characteristics bundle can be found at point R on the efficiency frontier. By choosing R, the consumer does the best he can to transform uncertain situations regarding future income into a certain setting, given only the pure forms of the insurance contracts.

In addition to policies A and B, Figure 3.1 also shows policies C to F and Z. These policies already combine characteristics z_1 and z_2 in a way that the consumer has to buy one policy only but still can collect certain amounts of both characteristics. For instance, consider policy D: the slope of the ray shows the relative proportion of the characteristics. Policy D is dominated by characteristic z_2, thus, in an insurance context, a pension insurance scheme which has been supplemented by a sum in case of death (z_1). In comparison, policy F which is dominated by characteristic z_1: such a contract would rather be an endowment life insurance than a pension insurance scheme. It can be seen that policy F includes the preferred combination of characteristics as in point R, but the price is such that the consumer can afford the amount F of that policy. Since point F contains more of each characteristic, it is efficient to choose F instead of R even if we do not consider preferences; as a result the efficiency frontier changes. Adding other contracts and prices, the efficiency frontier is pushed outward in this exemplified case. It can be seen in Figure 3.1 that the efficiency frontier forms a cone that consists of segments $\overline{AD}$, $\overline{DC}$, $\overline{CZ}$, $\overline{ZE}$, $\overline{EF}$, and $\overline{FB}$. Again, adding preferences, the consumer chooses a point on the efficiency frontier. In contrast to the efficient choice in the case with only the pure forms available, the efficient choice know is policy E since the consumer maximizes utility given his preferences.

Lancaster's approach can be stated more formally as follows:
Optimization yields the most preferred contract or policy (x_i) assuming the consumer acts as a rational individual and is fully informed. By purchasing x_i, the individual consumes the amount b_{ji} of characteristic z_j, whereas for the sake of simplicity $j = [1, 2]$

$$z_j = \sum b_{ji} x_i. \tag{3.1}$$

Therefore, the optimization has to consider the budget constraint (B) on the one hand, and the different products with different amounts of characteristics on the other hand:

$$\begin{aligned} max_{z_j} \quad & U(z_j) \quad s.t. \\ z_j \quad & = \quad \sum_i b_{ji} x_i \\ B \quad & \geq \quad \sum_i p x_i. \end{aligned} \tag{3.2}$$

But, the previous section suggests that consumers are uninformed. In fact, they lack the ability to match their preferences with different contract designs and, therefore, consumers cannot perform the optimization as suggested in Equation 3.2 or as depicted in Figure 3.1. Consequently, the model has to be extended: First, a model that deals with miscounseling has to account for the consequences which result from a different choice than the optimal contract. Second, such a model needs to consider the interaction of a consumer and an intermediary.

To include both aspects, the consequences of a "wrong" choice and the interaction of consumer and intermediary, I will translate the two dimensional graph including the relevant contracts, characteristics, and preferences into one dimension. The idea is based on the spatial model developed by Hotelling (1929), who introduced the idea of representing heterogeneous products and heterogeneous preferences along a line of unit length. Thus, connecting Lancaster's efficiency frontier on the one hand and the Hotelling interval on the other hand, using the previous example, Figure 3.1 can be transformed into the following figure.

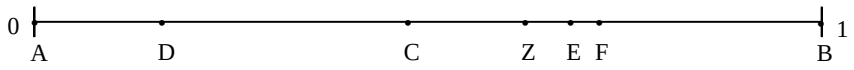

Figure 3.2: Example *(cont.)*: Interval

For example, it can be seen in Figure 3.2 that contracts A and B, thus the pure forms, represent the borders of the interval. Contract A only contains characteristic z_2 and, therefore, is located to the left of the interval, while the other extreme, contract B, is located on the right. Additionally, it is possible to fit all available contracts according to their proportion of characteristics, represented by the rays in Figure 3.1, in the interval. Thus, a contract (x) that is located in the left half of the interval basically is a contract that is dominated by z_2, i.e., policy D, whereas a contract that is located towards the right is dominated by the characteristic z_1, which would be the contracts Z, E and F according to the stated example. Clearly, a policy which contains both characteristics in equal shares will be located in the middle of the interval, for instance, policy C.

Hotelling (1929) uses distances along the unit line to quantify the additional costs that arise due to traveling. Several authors have applied the Hotelling model to insurance markets and interpret those traveling costs as disutilities due to a mismatch, for example,

Hofmann and Nell (2011) and Focht et al. (2013).
Adopting this idea, a consumer faces a disutility ($u^{dis.}$)

$$u^{dis.} = t(x_i - x_a)^2. \tag{3.3}$$

Equation 3.3 suggests that any contract (x_a) other than the optimal contract (x_i) yields a disutility due to its suboptimal ratio of characteristics. Since the difference in Equation 3.3 is squared, large deviations are considered to be even worse than small differences between similar contracts. Referring to the explicit example, the optimal contract would be policy E. Any other policy or combination of characteristics will be located on an indifference curve somewhere below I_1. The parameter t, $t \geq 0$, reflects the relative importance of a deviation from the optimal contract. If $t = 0$, a deviation does not matter to the consumer. As t increases, the substitutability decreases and deviations matter because the contracts become less equal from the consumer's perspective and, therefore, the loss in utility increases. Hence, in the context of insurance and insurance intermediation, t might be interpreted as a parameter that reflects the consumer's knowledge about insurance. Even if it is assumed that consumers cannot perform an appropriate match of preferences with contracts, it is feasible to allow for some heterogeneity in their knowledge.
Assume that an individual knows that an uninformed buying decision may lead to disutility. If the individual can observe the available contracts and prices but cannot perform a match, i.e., the individual can observe the efficiency frontier but cannot select a certain point on the frontier, it seems rational to pick an alternative that is located equidistant from each extreme product available and, thus, to minimize the maximal possible loss of utility. Considering the spatial depiction, these considerations lead to a contract that can be found half way in the interval. Let this contract be (x_e), namely, C in the example. This rather careful strategy is in line with the stated risk aversion in financial matters as pointed out in the case discussion section. Hence, an uniformed decision yields a disutility

$$u_e^{dis.} = t(x_i - x_e)^2. \tag{3.4}$$

Consumers tend to delegate the task of finding the optimal insurance policy to an intermediary. More generally, consumers rely on the information the intermediary provides, and then reconsider their initial choice. Thus, the consultations yield a correction of x_e and, therefore, the choice of another alternative. Let this correction parameter be α.

$$\alpha = x_e - x_a. \tag{3.5}$$

Solving (3.5) for x_a and substituting $x_a = x_e - \alpha$ in (3.3) yields

$$u^{dis.} = t(x_i - (x_e - \alpha))^2. \tag{3.6}$$

Thus, if parameter α yields a correction that $x_a = x_i$, the utility loss reduces to zero. Figure 3.3 represents the utility loss that is experienced without a consultation with an agent as well as the losses that occur whenever the agent's advice leads to the choice of an alternative contract.

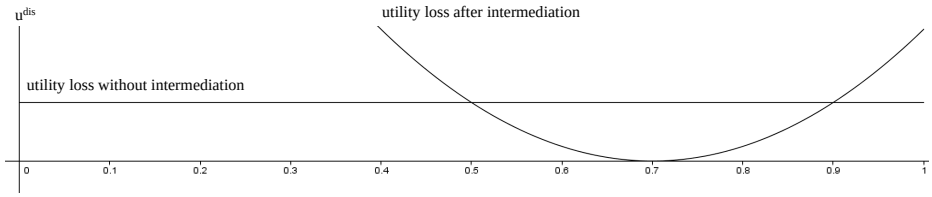

Figure 3.3: Utility loss with and without intermediation

$$x_e = 0.5, x_i = 0.7, t = 0.5$$

Behavior of the intermediary

Intermediaries are assumed to act rationally and to be interested in maximizing profits[8]. Almost all intermediaries in Germany act under a commission system, therefore, this remuneration scheme is considered[9]. Assuming that every intermediary has access to all products and contract designs, the relevant variables are the commissions and costs. The framework has to consider that the intermediary might receive different payments for different contracts. Since the model uses distances to cope with the heterogeneity of contracts, the interval which emerged from the efficiency frontier will be used again to account for revenues as well as for costs. It has been stated earlier that the contracts differ in their characteristics. Recall that, as we walk the interval from 0 to 1, the amount of the characteristic z_1 increases relative to z_2. Therefore, the contracts located in the left half of the interval are dominated by z_2, whereas the contracts located on the right are dominated by the characteristic z_1. As a result, the contract location, thus the dominance of either characteristic, will be used to represent the remuneration an intermediary receives if he sells a specific contract[10]. Thus, any contract x_a yields a commission δ_a as shown in Equation 3.7.

$$\delta_a = \beta_1 x_a + \beta_2(1 - x_a) \tag{3.7}$$

The parameter β_1, respectively, β_2, assigns a certain value to the distances from either end of the interval. As a result, it is possible to vary the commissions each contract

[8]Rationality requires maximization (Cooter and Ulen, 2004, p.15). Thus, firms rationally maximize profits given the economic circumstances (Cooter and Ulen, 2004, p.30).

[9]Only 0.09% of all registered intermediaries are paid via a fee-for-advice scheme in January, 2012 (DIHK Service GmbH, 2012).

[10]I realize that this way of accounting for remunerations does not represent commission agreements. Nevertheless, the use of distances can account for differences in remunerations which result from different proportions of characteristics.

yields. Consider a contract located at 0.7 in the interval. Following the argumentation above, this specific contract is dominated by characteristic z_1 but still contains a certain amount of the other characteristic, maybe policy E of the example stated earlier, and therefore an endowment life insurance. By placing weights, β_i, on the distances one can account for different policy schemes and differences in remunerations. For example, it can be observed that an endowment life insurance (Policy E) yields a higher remuneration than a term life insurance (Policy B). The latter is located at the right end of the interval, corresponding to $x_B = 1$, whereas the endowment life insurance is still located a $x_E = 0.7$. By placing weights $\beta_1 = 2$ and $\beta_2 > 2$ on the distances, it can be observed that the term life insurance (Policy B) yields a remuneration of $\delta_B = 2$, whereas the endowment life insurance yields $\delta_E > 2$. If β_1 and β_2 are equal, each contract yields the same payment. As soon as the weights are different, the remuneration an intermediary receives differs according to the contract he sells. This fact can be found in the market.

However, not only the revenues matter. Costs also influence the counseling advice. First, the intermediary faces costs due to a correction of the initial position of the consumer in the interval, i.e., α. This adjustment can be seen as a result of a counseling process which incurs costs (C) to the intermediary as stated in Equation 3.8.

$$C = t\alpha^2. \tag{3.8}$$

Those counseling costs can be treated as costs of diligence. The more effort the intermediary undertakes, the better the match between the individual preferences of the consumer and the given contractual alternative becomes. Additionally, parameter t matters. Recall the parameter t which describes the relative importance of a deviation from the optimal contract. Thus, as t increases, it is feasible to assume that the intermediary's costs to perform the optimal match increase as well. Furthermore, Equation 3.8 contains a squared term. Hence, the costs increase whenever the intermediary undertakes more effort, therefore, more effort is more expensive than little effort c.p.
Additionally, the cases in the previous section indicates that consumers might doubt their decisions since they are not fully informed and have to trust the intermediary's competencies. As a result, they might cancel contracts within a short period. Consequently, an intermediary has to take those additional costs, the so-called cancellation costs (M), into account. As already stated, intermediaries face a cancellation liability: consequently, the remuneration (δ_a) has to be an element of the cancellation costs as formulated in Equation 3.9.

$$M = \delta_a(x_a - x_i)^2 \tag{3.9}$$

Equation 3.9 states that the intermediary faces fewer costs as the match of x_i and x_a improves. Again, the squared term exacerbates large deviations. To summarize, the counseling costs increase the more effort the intermediary makes, but the cancellation costs decrease at the same time and vice versa. Figure 3.5 represents this coherence. The abscissa depicts the interval $[0, 1]$, whereas the ordinate shows monetary values,

costs in this case. It can be seen that the counseling cost curve is U-shaped and tangent to the abscissa at 0.5. Clearly, this has to be the case because the middle of the interval has been identified as the feasible position of a non-informed individual. Any effort to move the consumer away from that (rational) location induces costs. Considering the counseling costs it does not matter if the advice moves the consumer closer to the optimal contract or if the match worsens. Also, Figure 3.5 shows the cancellation cost curve: this curve is U-shaped too but is tangent to the abscissa at the optimal contract, 0.7 in this case. Again, each movement to another contract induces costs, because the intermediary faces a cancellation liability and has to repay a certain amount of the remuneration. Adding both cost curves yields the third function depicted, the total cost curve. The graph emphasizes the trade-off between counseling and cancellation costs, considering the fragment between the expected position in the interval ($x_e = 0.5$) and the location of the optimal contract.

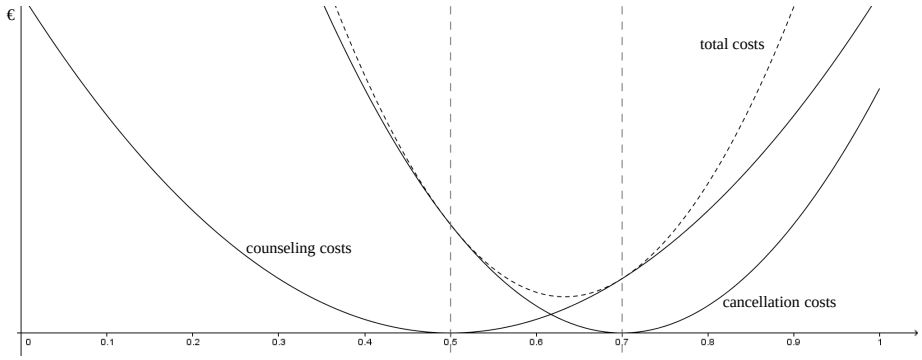

Figure 3.5: Cancellation, counseling and total costs

$$x_e = 0.5, x_i = 0.7, t = 0.5, \beta_1 = \beta_2 = 1$$

Considering revenues and costs yields the profit function (3.10).

$$\pi = \delta_a(x_a) - C(x_a) - M(x_a) \tag{3.10}$$

Optimizing Equation 3.10 for x_a yields

$$\frac{\partial \delta_a(x_a)}{\partial x_a} = \frac{\partial C(x_a)}{\partial x_a} + \frac{\partial M(x_a)}{\partial x_a}. \tag{3.11}$$

The left-hand side of Equation 3.11 states the difference between the parameters, i.e., $\beta_1 - \beta_2$[11], and the right hand side gives the changes in costs and, therefore, describes the already stated trade-off between the cost functions. Thus, the optimal choice from an intermediary's point of view is determined by the difference of the parameters β_i due to which different remunerations, depending on the location in the interval, might

[11] $\delta_a(x_a) = \beta_1 x_a + \beta_2(1 - x_a)$; $\frac{\partial \delta_a(x_a)}{\partial x_a} = \beta_1 - \beta_2$

occur. Figure 3.7 illustrates the intermediary's profits as well as the deviation of profits to graphically depict the intermediary's optimal choice. It can be seen that changes in β_2 yield different optimal choices. As soon as a higher weight is placed upon characteristic z_2 than upon z_1, the contract an intermediary is going to choose as a result of profit maximization will be located to the left: the graph of the derivation of profits rotates inward as β_2 increases.

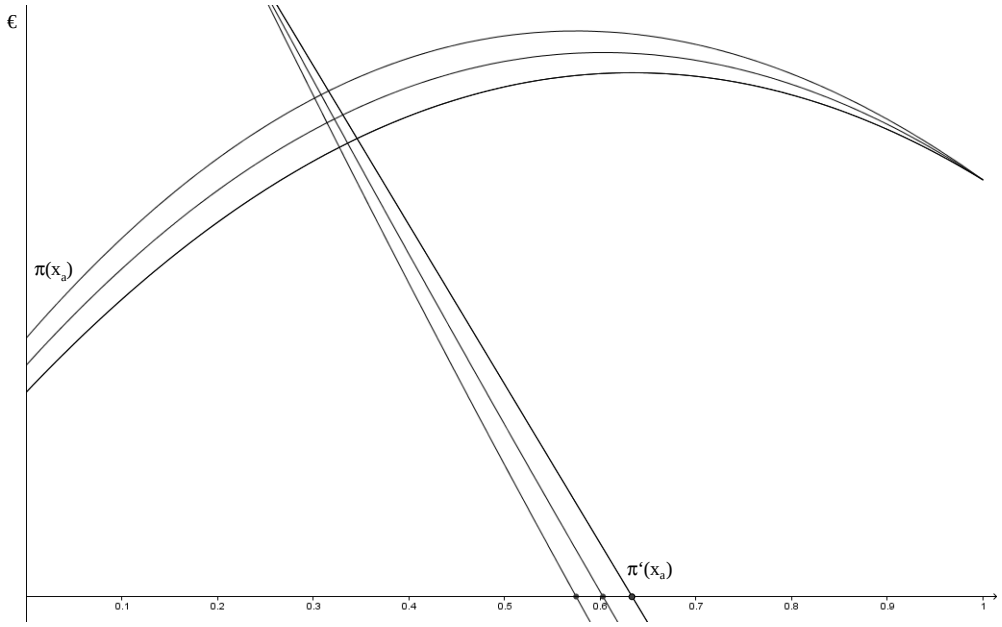

Figure 3.7: Optimal contract (intermediary)

$x_e = 0.5, x_i = 0.7, t = 0.5, \beta_1 = 1, \beta_2 = \{1, 1.1, 1.2\}$

Having identified the consumer's behavior as well as the intermediary's incentives to suggest some contract located in the interval, the interaction of both market participants can be analyzed. The intuition is shown in Figure 3.9: again, the graph depicts the interval that represents Lancaster's efficiency frontier, therefore, every contract and possible policy combinations can be found. Additionally, Figure 3.9 shows which policy the intermediary suggests as well as the utility loss that is experienced by the consumer. To stick to the earlier example, I already stated that 0.7 might correspond to policy E which would be the ideal contract given the circumstances the consumer faces. Thus, the U-shaped utility loss curve is tangent to the abscissa at precisely that point. Additionally, the graph shows the utility loss that occurs whenever the consumer receives no additional information and chooses the contract located in the middle of the interval; corresponding to policy C in the example. Furthermore, the graph also covers the optimal decision from the intermediary's point of view: as in Figure 3.7, the derivation of the profit function depicts the optimal choice as it intersects the abscissa. To continue the example, this point might be considered as policy Z. It can be easily seen that the

choice of policy Z instead of policy E causes a disutility on the part of the consumer. Still, the utility loss experienced is smaller than the utility loss without intermediation and thus without any additional information. In fact, this is the case as long as the intermediary suggests a contract that is located in the shaded area.

To summarize, even if the intermediary does not perform the match ideally, i.e., if $E \neq Z$, it is still better than the match the consumer could establish on their own. This is always the case as long as the contract x_a is located between x_e and $2x_i - x_e$, which represents the shaded area, in the interval. This approach gives rise to a definition of miscounseling that focuses only on the changes in utility. The utility changes result from a policy choice that is based upon additional information provided by an intermediary. Miscounseling can therefore be defined as the provision of any additional information that does not help to reduce the utility loss referring to an uninformed situation.

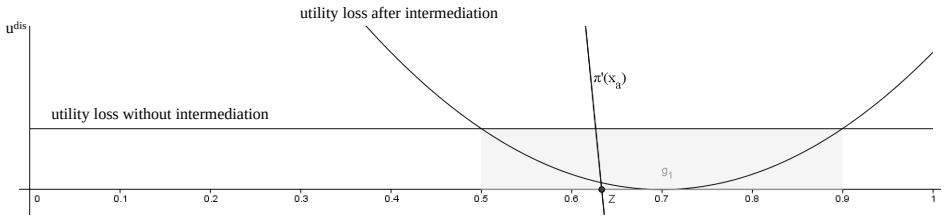

Figure 3.9: Optimal contract (intermediary) and utility loss (consumer)

$$x_e = 0.5, x_i = 0.7, t = 0.5, \beta_1 = \beta_2 = 1$$

3.3.2 Parameters of Miscounseling

The previous section gave a definition of miscounseling that is based upon utility losses due to additional information about the ideal contract. This section is supposed to take a closer look at the exogenous variables and to determine how changes in those variables affect miscounseling. As already pointed out in the previous section, all contracts that are located in the shaded area, between x_e and $2x_i - x_e$, result in less disutility than an uninformed choice. By applying the derived definition it can be concluded that any contract which can be found within the stated margins does not fulfill the definition of miscounseling.
Is it possible that miscounseling happens if every contract located in the interval yields the same remuneration? Within the stated framework, every contract yields the same payment whenever the weight parameters β_1 and β_2 are equal. To analyze whether miscounseling becomes possible assuming equal remunerations, I will refer to the optimality condition formulated in Equation 3.11. Even though the optimality condition in Equation 3.11 is stated rather generally for simplicity, it can be stated explicitly, of course, and solved for x_a. Assuming $\beta_1 = \beta_2$ the optimality condition yields Equation 3.12:

$$x_a = \frac{tx_e + x_i\beta}{t + \beta}. \tag{3.12}$$

From Equation 3.12, it can be concluded that the ideal contract never leaves the spectrum as long as the weight parameters are equal and positive. If $\beta_1 = \beta_2 = 0$, it is optimal not to correct the initial location at all, thus, $x_a = x_e$. Hence, a situation arises in which the boundary (x_e) is touched but still not crossed.
Beenken (2011) finds that similar contracts can yield different payments, thus, the assumption that an intermediary receives the same remuneration regardless of the type of contract, can be softened or even dismissed. Henceforth, β_1 and β_2 are assumed to be different. Recall that a contract which is dominated by, for instance, characteristic z_1, yields a total payment that is also dominated by parameter β_1 and vice versa. The second question is: is it possible to adjust the parameters β in such a way that an intermediary is going to suggest a contract which is not located within the identified area? Every contract beyond the spectrum yields a higher utility loss compared to the disutility a consumer has to put up with in the case of an uninformed choice. Hence, a consumer is indifferent between an informed and an uninformed choice whenever he chooses a contract that marks one of the boundaries of the spectrum. Since those contracts are known, it can be calculated how much the weight parameters have to differ. Again, using the profit maximization condition derived in Equation 3.11 and solving it for either β gives Equation 3.13.

$$\beta_1 = \beta_2[1 + \frac{2(x_i - x_a)}{x_i^2 - 4x_a x_i + 3x_a^2 - 1}] + \frac{2t(x_e - x_a)}{x_i^2 - 4x_a x_i + 3x_a^2 - 1} \tag{3.13}$$

Inserting the boundaries x_e or $2x_i - x_e$ yields differences in the parameter β that result in utility losses higher than in an uninformed situation. Staying with the example used in the graphs and previous sections and inserting the boundaries yields

$$\begin{aligned} x_e &= x_a \\ \Delta\beta &= -\frac{1}{3}\beta_2 \\ 2x_i - x_e &= x_a \\ \Delta\beta &= \frac{2}{3} + \frac{2}{3}\beta_2. \end{aligned}$$

Equation 3.13 and the example show that, depending on the exogenous and individual variable, a specific difference in remuneration is able to induce miscounseling in the present framework. However, in the example it becomes apparent that miscounseling might be a consequence of different payments, but not necessarily: it depends c.p. on the divergence.

If we allow for different payments, Equation 3.13 suggests that parameter t also affects the differential between β_1 and β_2. Assume t increases, i.e., the substitutability decreases and a deviation from the optimal contract matters more: an increasing t results in a greater difference between the weight parameters before the boundary is crossed. Thus, the less substitutable the contracts are from the consumer's point of view, the higher can be the difference in payments. This is due to the fact that consumers face a greater disutility in the initial situation as t increases. Consequently, the previous interpretation of t as a parameter that reflects the knowledge of the consumer in insurance matters still holds, since a high t describes contracts which are different from one another.

3.3.3 Rewording Section 61 VVG

The reform of the insurance law is supposed to strengthen the customer protection by imposing a fault-based liability. As already stated in the introduction, fault-based liability rules need a benchmark in order to change the incentive structure. Therefore, the previous sections suggest a definition of miscounseling that basically relates a situation without intermediation to an alternative situation in which counseling took place. In order to give advice which actually reduces the utility loss, the intermediary has to gather information about the preferences and general situation of the consumer. That information can be divided into easily accessible facts and others which are only limitedly available. Since the intermediary has, on the one hand, good knowledge about the market situation and, on the other hand, an expert know-how about the relevant variables which indicate the individual situation of the insured, it should be possible to obtain easily accessible information at reasonable costs. Additionally, an analysis based upon the gathered information should result in a contract that is located in the proposed spectrum and, therefore, increases utility from the initial situation.

The present liability rule uses open terms to determine situations in which consultation has to take place in general. It should have become obvious that the liability rule cannot be effective without a proper definition of miscounseling. Therefore, instead of using terms such as *"difficulty of assessing the insurance"* or *"situation gives occasion"* that have to be interpreted, it might be desirable to focus only on information. In particular, an intermediary who bases the advice on insufficient information only, even if additional facts were available and easily accessible, should be held liable. An intermediary cannot be held liable for wrong advice if the appropriate information was not easily available. Therefore, one could think about reformulating the existing paragraph in a way that only the availability of information matters:

Any advice given by an intermediary has to refer to sufficient information. The intermediary is liable for any advice given without considering relevant information which was easily accessible at reasonable costs. The intermediary can be exempted from liability only if the particular information was not available or was difficult to access at the time the advice was given.

Let's have a look at the cases again. If one considers the stated definition of miscounseling derived in the previous section and additionally refers to the accessibility of information as pointed out in this section, it should be possible to state what the intermediary should have done in order to obey the liability rule.
The first case presented dealt with the nursing care insurance that turned out to be casualty insurance. The intermediary was informed about the Alzheimer's disease of the consumer's husband during the dialogue as well as about the level of information with regard to nursing care that resulted from the personal concern. The record that documents the dialogue provides some evidence that the intermediary did not consider all the relevant information that was attainable, nor did he provide the essential facts in a way that the class and purpose of the presented insurance became clear. Since the product was a casualty insurance contract with a nursing care add-on, the insured event is an accident. Hence, the intermediary needed information about existing insurance policies in both classes: casualty insurance and private nursing care insurance. That information was easily accessible since the consumer already held a nursing care as well as a casualty insurance policy. Nevertheless, the intermediary recorded no insurance coverage in the relevant class, and he recommended the purchase of the presented product. That advice yielded a utility loss because the consumer became over-insured. In fact, information about the existing insurance policies was easily available, hence, the intermediary should have noticed that no additional coverage was needed and that the suggested product yielded no additional utility. Following the rewording of § 61 VVG, the intermediary is liable for the advice since he did not consider the easily available information about the existing policies.

In the second case, a 30-year old insurance policy was under examination. After reviewing the contract, the broker suggested a policy which covered fewer cases of legal protection, was more expensive, and included a deductible. The derived definition in the previous section states that miscounseling refers to any situation in which an advice of an intermediary yields a higher utility loss than an uninformed choice. Since the existing product covered more cases of legal protection, was cheaper, and did not have a deductible, it might be even doubted that the contract could be part of the efficiency frontier deducted from Lancaster's consumer theory. It seems plausible to refer to the situation as miscounseling. The second question is whether the intermediary could be held liable for the advice. For this purpose, the suggested rewording of § 61 VVG shall be considered once again. The intermediary is liable for the advice whenever he did not consider all easily accessible information. Focusing on the fact that the suggested policy covered fewer cases than the existing contract, it can be stated that information about the needs was accessible very easily. Even though things may change within a 30-year time period, information about the need for legal protection in employment matters is accessible at reasonable cost. The information could have been discovered simply by asking the consumer about the actual employment situation or about future retirement plans. Thus, the intermediary should have suggested a contract that at least exhibited

the same characteristics.

In the next case, a special child insurance policy was sold by the intermediary. As pointed out in the case description, the aim of the consumer was to fund and secure the future education and higher education of her children. The product she ended up with was a unit-linked pension insurance scheme with an occupational disablement insurance add-on. The way the individual contracts were designed, it was not possible to withdraw money for educational matters at any time. As a matter of fact, the preferences of the consumer and the characteristics of the product did not match at all. Thus, the consumer incurred a disutility from the choice. Obviously, the intermediary suggested a product that could not serve as an educational endowment insurance. What about the liability of the intermediary? The information about the preferences of the consumer was available. The children were still small at the time of the consultation, and the main and rather long-term objective, the funding of their education, had been stated quite clearly. Being an expert, the intermediary had to know that the surrender value of a pension insurance scheme increases slowly and that a withdrawal is not advisable. Additionally, the intermediary suggested picking the secure option since the insurance scheme was unit linked. By choosing that option, there was no possibility of withdrawing money, even if inadvisable. Consequently, any contract with a long-term perspective was not capable of serving as an educational endowment policy and should not have been suggested.

The last case dealt with two unit-linked pension insurance schemes that were taken out by the consumer at the age of 61. The main objective was to compensate for a loss of about $20,000$ EUR which resulted from the cancellation of a long term life insurance at a premature stage. Thus, the aim was not to insure longevity but to use the insurance as an investment. By the time the consumer decided to cancel the long term life insurance, he knew that he would suffer a loss but at that time he preferred this decision. Because of the advice of the intermediary, he faced a greater loss than before, thus, the definition of miscounseling is fulfilled. The intermediary presented several calculations during the consultation: all calculations referred to different commencements of retirement but had an assumed annual performance of 9% in common. Even in 2005 an annual performance of 9% was rather unrealistic. Again, being an expert, the intermediary knew that a contract like a pension insurance scheme had a long term perspective and that all costs were covered by the first premium payments and therefore was not an adequate short term investment. The information about the rather short time horizon was accessible since the consumer was 61 years old and already retired at the time of the consultation. Since the initial loss resulted from a premature cancellation of the long term insurance it would have been appropriate to advice against it in the first place. Any insurance policy without the main objective of insuring is too expensive and cannot be an alternative that should be considered in this case.

3.4 Conclusions

The main purpose of the chapter was to give a general definition of miscounseling and to identify situations of miscounseling in a simple framework. First, some cases were used to identify situations in which consumers relied upon an intermediary as an expert. The basic insights can be summarized as follows: consumers are risk averse in financial matters and, additionally, do not consider themselves to be experts in insurance matters. For those reasons they tend to delegate their decisions and generally rely on the advice given by the intermediary. Nevertheless, the cases suggest that consumers undergo a kind of learning procedure while reconsidering their decisions or gathering additional information, which may lead to cancellations within a certain cancellation period. Thus, even though consumers cannot perform a proper match between their preferences and existing contract alternatives, they might possibly be able to refine their decision, e.g., by reading the delivered policy or talking with family or friends.

Second, the model introduces a framework that considers the utility losses of the consumer in either situation and describes the profit maximizing behavior of the intermediary, who has to take different costs into account. The framework suggests a definition of miscounseling that uses the uninformed choice of the consumer as a benchmark. Thus, even though the consumer's preferences might not match the ideal contract, the individual can still be better off than in a situation without any advice. Following the given definition of miscounseling results in a spectrum of "right" advice and, therefore, defines a diligence level that can serve as a benchmark. Basically, the liability rule forces the intermediary to take the utility losses resulting from a mismatch into account. Consequently, the optimal contract location differs from a situation without any (extra) liability.

The definition contributes to the discussion on how to cope with the vague legal terms employed in the Insurance Contract Act. Additionally, the chapter offers an alternative formulation of the liability rule since the whole discussion can be focused on information availability and the analysis of those facts. Nevertheless, much more research needs to be done in this field: for example, the actual losses due to miscounseling are hardly known. Oehler (2012) finds that losses arising from miscounseling, amount to billions of Euros in the matter of life insurance alone. No database exists that can be used to evaluate the impact of the institutional changes on the intermediary market. And even in this framework, it might be reasonable to treat different types of intermediaries, i.e., tied agents or brokers, differently and to extend the model.

4 Liability Rule Failures? Evidence from German Court Decisions

4.1 Introduction

The debate about implementing institutional change to improve counseling and advice by insurance intermediaries in Germany is ongoing. For example, the discussion about the remuneration schemes (Focht et al., 2013; Hofmann and Nell, 2011), commissions or fee-for-advice, as well as the cap on commissions for private health insurances since 2012[1] indicate an attempt to counter the trend of opportunistic behavior due to asymmetric information. Since 2007, laws have also regulated the market for insurance intermediary services in Germany and all agents and brokers face negligence liability that reallocates risks and sets economic incentives.

In Germany, as in all of Europe, the liability rule arises from EU directives[2] and accounts for failures resulting from neglect of information, counseling and documentation duties. Similar duties exist in the United States even though liability is not explicitly codified. Since individual states regulate insurance in the U.S. (Randall, 1999), the details of regulation matters differ from state to state. Nevertheless, many U.S. courts recognize that insurance agents, as well as insurance brokers, have a duty to exercise reasonable skill, care and diligence (e.g. *Dimeo v. Burns, Brooks & McNeil*; similar *Meridian Title Corp. v. Gainer Grp.*)[3]. Furthermore, intermediaries are held liable if they fail to procure the requested coverage (e.g. *Dreibelbiss Title Co., Inc. v. MorEquity, Inc.*; also *Shea v. Jackson*)[4]. Pasich and Smith Thayer (2010) state that brokers were held liable in a variety of circumstances which include not only the failure to procure coverage, but also cases in which the broker did not take measures to avoid a coverage dispute. U.S. courts also require consumers to read insurance policies (*Kirk v. R.*

[1] Gesetz zur Novellierung des Finanzanlagenvermittler- und Vermögensanlagenrechts (VermAnlGEG) December 06, 2011 (Federal Law Gazette Part I No.63, page 2481) becoming effective on 01/01/2012.

[2] (*2002/92/EG*)

[3] Dimeo v. Burns, Brooks & McNeil, Inc., 6 Conn. App. 241, 504 A.2d 557 (1986), cert. denied, 199 Conn. 805, 508 A.2d 31 (agents); Ursini v. Goldman, 118 Conn. 554, 173 A. 789 (1934) (brokers); Meridian Title Corp. v. Gainer Grp., LLC, 946 N.E.2d 634, 637 (Ind. Ct. App. 2011), also Craven v. State Farm Mutual Automobile Insurance Co., 588 N.E.2d 1294, 1296 (Ind. Ct. App. 1992) and Humiston v. Rowley, 512 .W.2d 573, 574-75 (Iowa 1994).

[4] Dreibelbiss Title Co., Inc. v. MorEquity, Inc., 861 N.E.2d 1218, 1222 (Ind. Ct. App. 2007); also Shea v. Jackson, 245 A.2d 120 (D.C. 1968).

Stanford Webb Agency, Inc.)[5], to provide all relevant information (*Dahlke v. Zimmer Ins. Agency*)[6], and to deliver proof of negligence (*Bayly, Martin & Fay v. Pete's Satire*)[7]. Arkansas law even obligates the consumer to "educate herself concerning her insurance" (*Mans v. Peoples Bank*)[8] unless a special relationship exists. Thus, U.S. courts recognize certain requirements applicants and policyholders have to fulfill in order to not be held responsible for contributory negligence (*Kirk v. R. Stanford Webb Agency, Inc.*). Even though the remainder of this paper deals with German legal rules, the liability issues and aspects of contributory negligence are quite similar to topics discussed in U.S. insurance law.

European insurance liability regulations aim for an improvement of consumer protection. Nonetheless, the ongoing discussion generates additional ideas and rules to strengthen consumers' position even more. So, the question arises, does the liability rule influence the agent's behavior at all or, at least in the intended way, or does it not? Analysis of different liability rules are well established (e.g. (Adams, 1985); (Shavell, 1987); (Miceli, 2004)), and liability rule failures are well-known in the law and economics literature. Endres (1991) gives a detailed overview. For instance, a liability rule does not produce the intended outcome if the consumer cannot provide the necessary proof of causality between the intermediary's fault and the resulting damage. In Germany, regional and higher regional courts (Land- und Oberlandesgericht) were involved in lawsuits concerning counseling with misinformation in the last several years. The present paper analyzes twelve verdicts and seeks to provide evidence for failure of the current liability rule. It therefore contributes to the discussion of regulation in this field.

The paper is organized as follows: First, the current liability rule and the rule concerning contributory negligence are stated in Section 4.2. The economic considerations of negligent liability rules are presented as well as potential failures. The third section introduces twelve court decisions based upon "new" liability rule. Furthermore, the section provides an analysis of the cases based upon the theoretical findings and extracted parameters, as well as a discussion of results. Section 4 presents the conclusion.

4.2 Legal Rules and Economic Analysis

As a result of market interventions by the European Union in 2001[9], intermediaries throughout Europe now face liability concerning counseling activities. In Germany, the EU directive was implemented into German law via a reformation of the Insurance

[5]Kirk v. R. Stanford Webb Agency, Inc., 75 N.C. App. 148, 330 S.E.2d 262, rev. denied, 314 N.C. 541, 335 S.E.2d 18 (1985).
[6]Dahlke v. Zimmer Ins. Agency, 245 Neb. 800, 515 N.W.2d 767 (1994); Manzer v. Pentico, 209 Neb. 364, 307 N.W.2d 812 (1981).
[7]Bayly, Martin & Fay v. Pete's Satire, 739 P.2d 244 (Colo. 1987).
[8]Mans v. Peoples Bank of Imboden, 340 Ark. 518, 10 S.W.3d 885 (2000).
[9]Directive 2002/92/EG

Contract Act (VVG).[10] This section states the specific design of the current liability rule, including contributory negligence issues. Additionally, this section introduces the economic view on these kinds of liability rules.

4.2.1 The Current Liability Rule in Germany

The liability rule is stated in § 63 VVG[11]. It represents the basis for a claim.
"The insurance intermediary shall be obligated to compensate for loss incurred by the person wishing to take out insurance on account of a breach of one of the duties under section 60 or section 61. This shall not apply if the insurance intermediary is not responsible for the breach of duty."[§ 63 VVG].
The negligence rule uses wording that expresses defense of contributory negligence referring to every insurance intermediary independent of the legal type. As far as brokers are concerned, this liability rule is *lex specialis* compared to the general liability rule defined in German law, § 280 para.1 BGB[12]. Importantly, the rule defines new personal liability with respect to all types of agents, either tied to only one company, or in cooperation with multiple insurers (Dörner, 2010, § 63 recital 1). The obligatory indemnification is basically triggered by a breach of one out of four duties (Dörner, 2010, § 63 recital 5,8). First, each intermediary has to base advice upon a sufficient number of contracts. Whereas a broker has to refer to the entire market, an agent has to select a contract from his particular basis (Schmidt, 2011, p.271). Of course, a tied agent has only one insurer to select from whereas another agent might be able to choose between several insurers and contracts. Thus, the requirement becomes more stringent the less an intermediary depends on a single insurer. Once an intermediary restricts the basis, the consumer has to be informed otherwise liability ensues. A third duty relates directly to risk assessment, the advice given and the corresponding reasons; likewise, it affects every intermediary. Last, each intermediary has to fulfill specific documentation requirements. Documentation is supposed to state the content of the counseling interview, as well as the reasoning behind advice given. Missing documentation lessens the burden of proof from the consumers' point of view (Dörner, 2010, § 63 recital 12). Despite implementation of concrete duties, the legislation did not formulate a special regulation concerning the plea of contributory negligence (Oetker, 2012, § 254 recitals 7-9). Thus, § 254 BGB is applicable.
"(1) Where fault on the part of the injured person contributes to the occurrence of the damage, liability in damages as well as the extent of compensation to be paid depend on

[10] Insurance Contract Act (Versicherungsvertragsgesetz (VVG)) November 23, 2007 (Federal Law Gazette Part I, page 2631), becoming effective on 01/01/2008; last changes 07/27/2011 (Federal Law Gazette Part I, page 1600) with effect from 08/04/2011.
[11] § = section.
[12] German Civil Code (Bürgerliches Gesetzbuch (BGB)) version January 02,2002 (Federal Law Gazette Part I, page 42,2909, 2003 I page 738) last changes June,26 2013 (Federal Law Gazette Part I, page 1805).

the circumstances, in particular to what extent the damage is caused mainly by one or the other party.
(2) This also applies if the fault of the injured person is limited to failing to draw the attention of the obligor to the danger of unusually extensive damage, where the obligor neither was nor ought to have been aware of the danger, or to failing to avert or reduce the damage. The provision of section 278 applies with the necessary modifications."[§ 254 BGB].
Basically, the section states a victim faces contributory negligence whenever it disregards the due care standard expected from a judicious individual (Oetker, 2012, § 254 recital 30). The relevant standard of due care refers to an objective level, thus the behavior of any comparable consumer. The individual knowledge and situation is not the decisive factor. The plea of contributory negligence is a defense for injurers (Miceli, 2004) and results in partial compensation only whenever the consumer carelessly violates a duty. The resulting compensation rate depends upon the severity of the default.

4.2.2 Economic Analysis

A liability rule is supposed to govern the behavior of the involved parties. Depending on the design of the liability rule, additional costs are either generally implemented or the law establishes a relationship between a specific due care standard and the need to cover those costs. As pointed out in the previous subsection, the current law provides a rule that accounts for negligence with a defense of contributory negligence. The economic theory of law and economics provides a theoretical framework to analyze different kinds of liability regimes. First, the basic model will be introduced. Afterwards, different reasons the rules might be not effective are considered.

The Basic Model

Intuitively, it can be stated that if no liability rule is in place, the intermediary basically has no incentive to avoid poor counseling, except for avoiding damage to their reputation (Shavell, 1987, p.11). In that case the consumer has to bear the entire cost, which leads to a high care level on the consumer's side. The present liability rule is supposed to reallocate the risk of poor counseling in a decentralized, preventive way and to sanction any violations (Rehbinder, 1992). The rule states an intermediary is responsible for mistakes which result from not obeying the assigned due care standard, but the liability is only triggered if the victim, in this case the consumer, is not liable for contributory negligence. The definition of the negligence rule demands a due care level that is defined by law and hence exogenous. Even though the legislation might be mistaken about the level, let's assume a correct estimation while considering the basic model. Furthermore, let's assume risk neutral individuals with complete and symmetric information, as well as perfect competition (Endres, 1991, p.14).

A victim (Y) might suffer a loss L with a probability ρ[13]. In order to avoid the loss, the victim can take precautions y that give rise to avoidance costs $c_y(y)$. Those costs are assumed to be a linear function depending on the level of precaution. On the one hand, the more preventive care the victim takes, the higher the resulting avoidance costs. On the other hand, a high precaution level reduces the expected harm $ES = \rho \cdot L$. On the contrary, the injurer (X) is also able to prevent harm by precautions x. The care level determines the necessary avoidance costs $c_x(x)$ but also reduces the degree of expected damages. Thus, the total costs amount to:

$$K^G = c_x(x) + c_y(y) + ES(x, y). \tag{4.1}$$

The aim of tort law is to reallocate the risks in a way that the total costs are minimized (Schäfer and Ott, 2012, p.184). Minimization of Equation 4.1 yields the following optimality conditions for x^* and y^*

$$\frac{\partial c_x}{\partial x} = -\frac{\partial ES}{\partial x}; \tag{4.2}$$

$$\frac{\partial c_y}{\partial y} = -\frac{\partial ES}{\partial y}. \tag{4.3}$$

x^* and y^* represent the efficient due care levels that are ideally required by law. From the victim's and the injurer's point of view, is it individually rational to obey the given standard? To answer that question, the individual cost functions become relevant. Without any liability rule the victim has to bear the entire expected harms. Due to the liability rule, the individual cost functions contain a parameter ϕ that allows for a reallocation of the risk as stated in equations (4.4) and (4.5):

$$K_x^G = c_x(x) + \phi ES(x, y), \tag{4.4}$$

$$K_y^G = c_y(y) + (1 - \phi) ES(x, y). \tag{4.5}$$

The stated liability rule shifts the risk burden onto the injurer if he does not at least opt for the given due care standard, x^* in this case. Additionally, the victim has to choose y^* at least. Therefore, ϕ takes the values 0 or 1, respectively. It has to be recognized that this basic model of the negligence liability rule does not account for a splitting of the damages. In this simple model, either the victim or the injurer has to account for the whole damages.

$$\phi = \begin{cases} 0 & : \quad x \geq x^* \\ 0 & : \quad x < x^* \quad \text{and} \quad y < y^* \\ 1 & : \quad x < x^* \quad \text{and} \quad y \geq y^* \end{cases}$$

Figure 4.1 illustrates the liability rule; Graph a) refers to the intermediary whereas Graph b) illustrates the consumer's perspective. Under the assumption that the victim

[13]The whole section refers to Endres (1991) and Adams (1985).

chooses y^*, the injurer has to bear cost amounting to K_x^G as long as the precaution level x is less than x^*. If he obeys the given due care standard by choosing x^* the costs immediately drop to K_x^{min} since only the avoidance cost have to be considered. As the avoidance cost function is strictly increasing, it is reasonable to select a care level as small as possible. Therefore, the relevant cost function approaches its minimum at K_x^{min}.

If, however, the victim is liable for contributory negligence ($y < y^*$) the relevant cost function reduces to $c_x(x)$. Hence, any standard below x^* is now preferable. Thus, the injurers', i.e. the intermediary, optimal choice depends upon the action the victim takes. The consumer has to bear the entire costs K_y^G (Figure 4.1b) if either the injurer selects $x \geq x^*$ or the victim itself does not comply with the legal requirements, $y < y^*$. From Table (4.1) it can be concluded that the consumer has a dominant strategy to choose y^*. Even if the injurer fulfills the requirements it is rational to select y^* because it minimizes the victim's total costs, hence, inequality $c_y(y)+ES(x^*,y) > c_y(y^*)+ES(x^*,y^*)$ applies.

Victim	Injurer	
	$x < x^*$	$x = x^*$
$y < y^*$	$c_y(y) + ES(x,y)$	$c_y(y) + ES(x^*,y)$
$y = y^*$	$c_y(y^*)$	$c_y(y^*) + ES(x^*,y^*)$

Table 4.1: Victim: Dominant Strategy y^*

In sum, the victim complies with the legal requirements and picks y^*. For a given action y^*, it is optimal for the injurer also to comply. Therefore, a negligence liability with contributory negligence redistributes the risk allocation in an efficient way. The individual choices result in a socially efficient equilibrium (x^*, y^*).

As stated earlier, the basic model does not account for the splitting of damages. The question is, does the consideration of a rate changes the results concerning the efficiency of the present liability rule? Basically, injurer and victim have to split damages if neither of them fulfilled the defined care level. Thus, instead of taking only the values of 0 or 1, ϕ can now take on all values in between, according to a previously defined allocation formula. According to Endres (1991) and Adams (1985), the assumption of a relative deviation is feasible. First, the percentage of deviation has to be calculated. In a second step, those percentages have to be referred to the entire magnitude of carelessness in order to determine the individual rates. As a result, ϕ can take the values as following:

$$\phi = \begin{cases} 0 & : \quad x \geq x^* \\ 1 & : \quad x < x^* \quad \text{and} \quad y \geq y^* \\ \frac{\frac{x^*-x}{x^*}}{\frac{x^*-x}{x^*}+\frac{y^*-y}{y^*}} & : \quad x < x^* \quad \text{and} \quad y < y^* \end{cases}$$

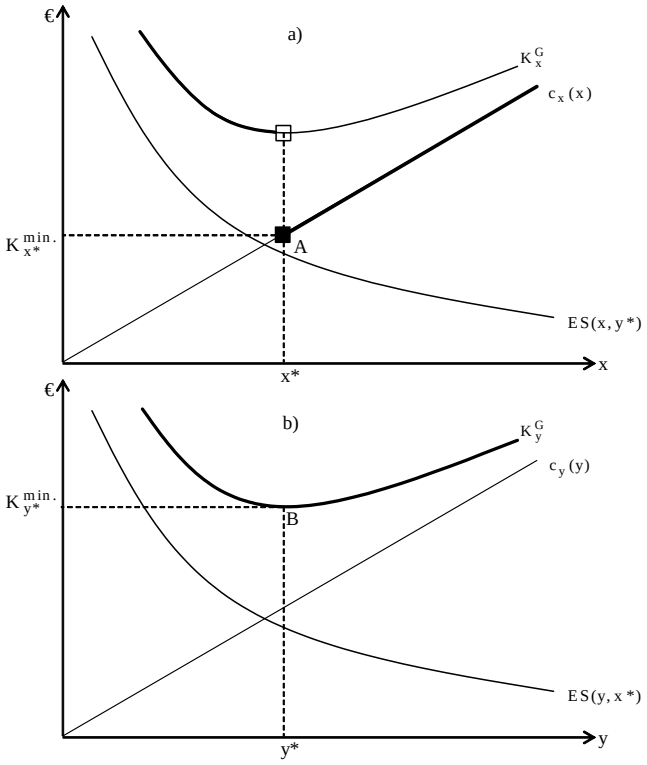

Figure 4.1: Negligence rule

The question, "Does an (efficient) equilibrium results despite the splitting of damages?"' can best be analyzed by using a cost matrix. Table 4.2 shows the matrix and the relevant costs that arise from Equations 4.4 and 4.5. Therefore, if the injurer/ intermediary chooses $x = x^*$ he has to calculate with avoidance costs only when any other choice results in higher cost, but depends on the action of the victim/ consumer. The depicted arrows in Table 4.2 point at the individual choice given the action of the other player[14]. Since the selection of x^* and y^* is always cost minimizing, the efficient equilibrium evolves. Hence, the introduction of rates does not change the incentive structure compared to the basic model of negligence liability with contributory negligence.

Liability Rule Failures

A liability rule fails if it is not possible to harmonize the collective and the individual rationalities (Wätzold, 1998, p.163). Endres (1991) found that different failures might affect the efficiency of the liability rule. In particular, if the expected harms and the

[14]This equilibrium only forms if one applies Nash strategies. Any other equilibrium concept (e.g.MinMax) results in a different equilibrium. Additionally no mixed strategies are analyzed.

		Care level injurer (Intermediary)	
		x < x*	x = x*
Care level victim (Consumer)	y < y*	$c_x(x) + \phi \cdot ES(x,y)$ → $c_x(x^*)$ $c_y(y) + (1-\phi) \cdot ES(x,y)$	$c_y(y) + 1 \cdot ES(x^*,y)$
	y = y*	↓ $c_x(x) + 1 \cdot ES(x,y^*)$ → $c_x(x^*)$ ↓ $c_y(y^*)$	$c_y(y^*) + 1 \cdot ES(x^*,y^*)$

Table 4.2: Splitting of damages: efficient equilibrium

expected compensation payments diverge, the estimation of the costs and/or losses is biased, or the court defines a suboptimal due care level, it might be individually rational to ignore the level of due care. Table 4.3 summarizes those aspects.

Failure	Because of...	Effect on due care levels
1. Expected losses ≠ expected compensation payments	lack of causality, no accountability of loss possible, no monetary value for loss, limitation of liability	(x^*, y^*) or $(x_2(< x^*), y_1 < (< y^*))$; depending upon the degree of underestimation
2. Objective losses ≠ subjective losses	Informational deficits concerning the estimation of losses.	underestimation: $(x_1(< x^*); y^*)$, $(x = 0, y(x = 0))$ or no equilibrium; overestimation: $(x^*, y_2(> y^*))$
3. Definition of suboptimal care levels $(\overline{x}, \overline{y})$ by institutions.	Informational deficits concerning the estimation of losses.	underestimation: $\overline{x}(< x^*)$ overestimation: - if $\overline{x} >> x^*$ and $\overline{y} = y^* \rightarrow (x^*, y^*)$ - if $\overline{x} = x^*$ and $\overline{y} >> y^* \rightarrow (x = 0, y(x = 0))$ - if either $\overline{x} > x^*$ and/or $\overline{y} > y^*$ $\rightarrow$ no equilibrium - if both care levels are overestimated ('>' and '>>'), only inefficient equilibria can be reached: $(x = 0, y(x = 0))$ or $(x(\overline{y}), \overline{y})$

Table 4.3: Overview of different liability rule failures according to Endres (1991)

The first aspect in Table 4.3 deals with situations in which expected damages and expected compensation payments differ, for example in cases that lack a causal relationship between the fault and the damage. In this case, the theory predicts either an inefficient care level because it might be optimal for the injurer to select a care level which is too low compared to the efficient standard (Endres, 1991, p.65), or the difference in actual and expected damages is small and the socially optimal care level turns out to be the best choice. The causal relationship has to be definable (Endres, 1991) in order to avoid this failure. Additionally, the specific design of the causality is crucial for the effect of the liability rule (Rehbinder, 1992, p.50). Thus, it is important how the burden of proof is allocated between the parties. Therefore, as it might be impossible to determine the causality in each case, both players might calculate with a pro rata liability only, which could yield suboptimal care levels.

Consider the situation to be such that the intermediary expects a punishment in some cases only. The expectations are formed because the agent that the consumer will succeed in proving poor counseling only in some cases. Additionally, the intermediary

might expect counseling failure to remain undetected in several cases; therefore, he calculates with a fraction of the expected damages (ES), only. The cost functions of injurer and victim change to Equations 4.6 and 4.7 whereas α represents a discounting factor.

$$K_x^G = c_x(x) + \alpha ES(x,y) \tag{4.6}$$
$$K_y^G = c_y(y) + (1-\alpha) ES(x,y) \tag{4.7}$$

Figure 4.2 depicts the potential discount from the intermediary's perspective. If the discount is low ($\alpha < 1$) the intermediary expects total costs to be $K_{x_1}^{\min.\exp_1}$. Since these costs are higher than those resulting from choosing the care level x^* ($K_{x*}^{\min.}$), it is rational to select the efficient care level. However, if the discount is high ($\alpha << 1$), the intermediary expects total cost to be as high as $K_{x_2}^{\min.\exp_2}$. In this situation it is individually rational to choose $x_2 < x^*$. If the consumer believes the discount holds, he will select a care level y_1 that exceeds y^* because of the substitutability of the care level assumed. Obviously, it depends upon the intensity of the discount (α) whether it becomes rational to disobey the due care level x^*.

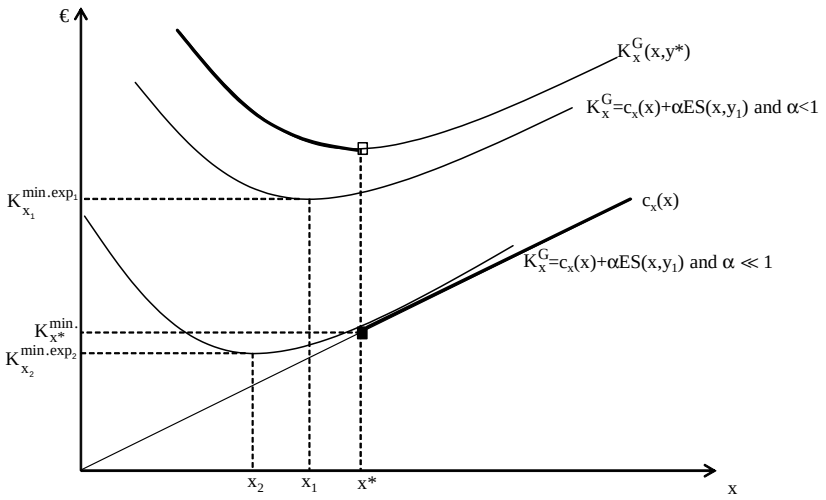

Figure 4.2: Discounting expected damages

The second aspect mentioned in Table 4.3 relates to informational deficits concerning the estimation of losses. Thus, it might be the case that individually expected losses differ from objectively expected losses. The analysis is quite similar to the previous one, except that informational deficits concerning losses might affect both parties. Consider first the case in which both parties underestimate expected losses. Similar to the situation of discounting the costs, it depends upon the degree of underestimation if it is individually rational to ignore the given care level x^* or to select a level $x_1 \neq x^*$. Assuming first

that it is not cost minimizing behavior to disobey the care level, hence, the intermediary chooses x^* and has to pay avoidance cost only. In this situation, the consumer has to bear all costs. Because of the underestimation of losses and the substitutability of care levels, the consumer selects a care level $y_1 < y^*$. However, when accounting for contributory negligence, the care level y_1 is too low. Accordingly, the intermediary cannot be held liable and the best response is not to provide any carefulness at all ($x = 0$). The consumers best response to $x = 0$ is $y(x = 0)$ which might exceed $y*$. Independent of the true value of y, it is not possible to reach equilibrium because both possibilities result in a circular process. In comparison, a situation in which it is individually rational to ignore the stated level x^* and, therefore, to minimize the total costs results in an equilibrium if y^* is the best response of the consumer. Nevertheless, the equilibrium $(x_1(< x^*); y^*)$ is inefficient. If, on the other hand, the consumer chooses $y_1 < y^*$, the best response of the intermediary would be to not provide any carefulness ($x = 0$), which induces an increase of care on the consumers' side. If that care level ($y(x = 0)$) exceeds y^*, the cycle restarts; if the care level stays below y^*, another inefficient equilibrium is reached at $(x = 0, y(x = 0))$.

Now, consider the case in which both parties overestimate the losses. In this case it is individually rational from the intermediary's point of view to select x^* because he has to pay avoidance costs only. The consumer has to bear all costs and, therefore, minimizes total costs. Due to the overestimation of losses, the minimum of the (assumed) total costs is always located to the right of the efficient care level. Hence, the consumers choice is $y_2 > y^*$. The equilibrium consists of the pair (x^*, y_2).

Third, it is doubtable that the jurisprudence has all relevant information to determine the efficient due care levels x^* and y^* without any mistakes. If the standard falls below the efficient level, the intermediary will fulfill that requirement doubtlessly because the avoidance costs are always lower than the total costs. In the case of overstretched levels of due care, the intermediary and consumer reactions are not clear since they depend upon the severity of the overestimation. For further analysis, let $\overline{x}, \overline{y}$ be the care levels defined by courts. For example, if the court excessively[15] overstates the care level of the intermediary ($\overline{x} >> x^*$) but sets the level of the consumer at the optimal standard ($\overline{y} = y^*$), efficiency occurs. Figure 4.3 illustrates the reasons. If no mistake happens, the intermediary will choose A' which corresponds to standard x^*. The consumer has to bear all costs and selects D' which is the best response. Now, the court defines a care level $\overline{x}$. If the intermediary fulfills that standard, he is no longer liable, but has to pay avoidance costs $c_x(\overline{x})$ as represented in point C. By disobeying the exogenous given care level $\overline{x}$ the intermediary will be held liable, has to calculate with K_x^G and will select the cost minimizing option, hence, point A. Since the injurer chooses the efficient care level x^* in point A, the victim's best response is to select y^*. Thus, the socially optimal

[15] Differentiation of moderate inefficient care levels (e.g. $\overline{x} > x$) and excessive inefficient levels e.g. ($\overline{x} >> x$).

combination of care levels arises.

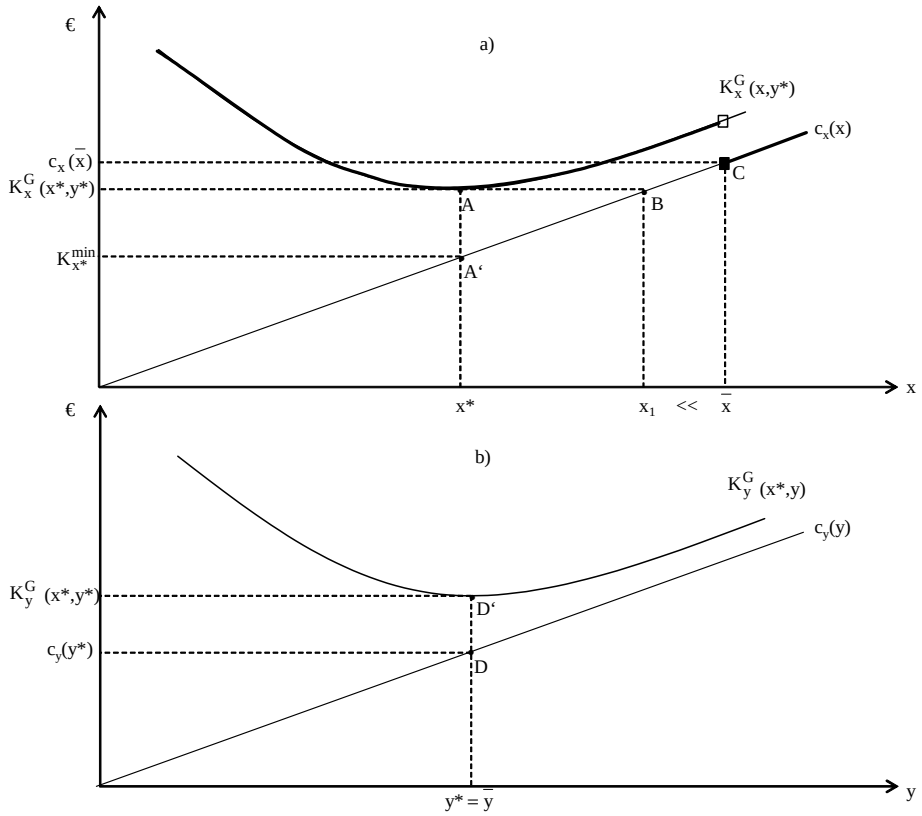

Figure 4.3: Efficiency even though the care standard $\overline{x}$ is overstated

But, Figure 4.3 also suggests the result might differ if the court defines a care level between x^* and x_1. In those cases it is cost minimizing to fulfill that care level and select the care level, even though it exceeds the efficient one. Figure 4.4 and Table 4.4 depict the dynamics of a potential convergence towards equilibrium which will never be reached in this case.

As shown in Figure 4.4, the intermediaries' best choice is to select care level $\overline{x}$ that corresponds to point 1 in graph *a*). Because of that choice and the substitutability of care levels, the consumer faces decreased total costs, and a downward shift of total costs in graph *b*). Since $\overline{x}$ exceeds x^* the consumer minimizes the total cost, which corresponds to point 2 in graph *b*). However, that choice falls below the care level $\overline{y}$, which represents the required care level of contributory negligence, and the intermediary cannot be held liable any more. Therefore, the intermediaries best response is to choose a care level of zero, because it minimizes the avoidance costs; this corresponds to point 3 in graph *a*). Without any care in the intermediaries' responsibility, the total costs that the consumer faces increases so that their minimum exceeds the defined (and also efficient) care standard. Therefore, the best response to $x = 0$ is to choose $y^* = \overline{y}$

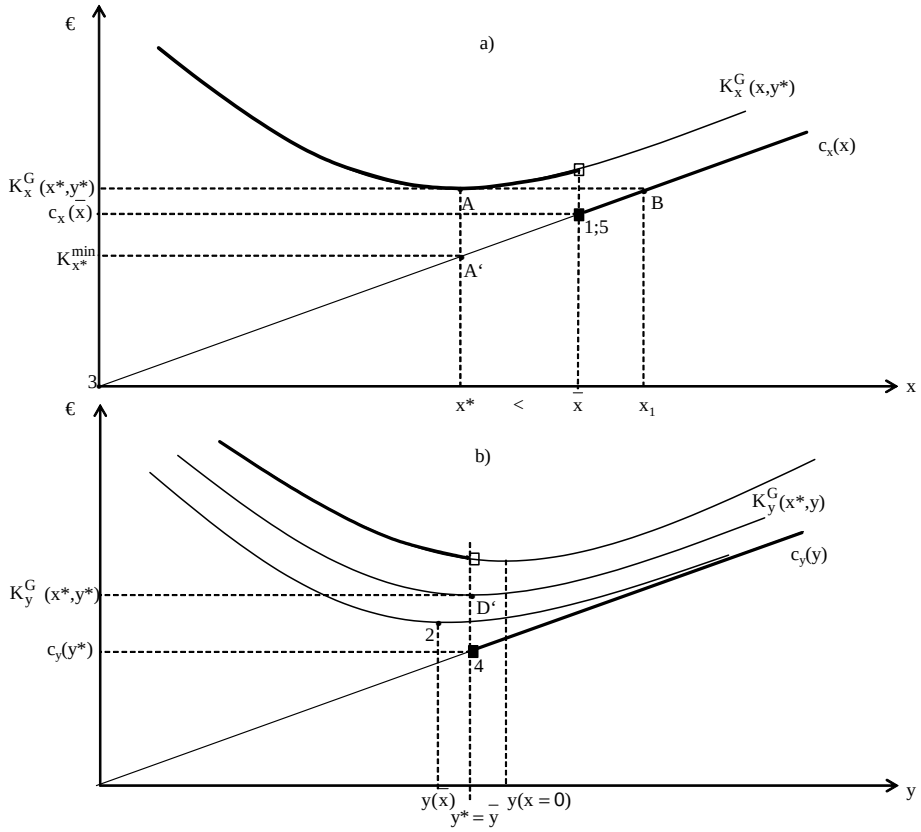

Figure 4.4: No efficiency because the care standard $\overline{x}$ is overstated

which is shown in point 4 of graph *b*). Now, the intermediary can be held liable and has to figure out if it is best to fulfill or to breach the required care level $\overline{x}$. That choice brings the analysis back to its starting point 5 = 1 in graph *a*). Hence, the process of adjustment never stops and no equilibrium can be reached. The same result is stated in Table (4.4) in which the circular reasoning becomes even more obvious.

		Intermediary	
		fulfils $\bar{x}$	does not fulfil $\bar{x}$
Consumer	fulfils y*	$c_x(\bar{x})$ $c_y(y^*) + ES(\bar{x}, y^*)$	$c_x(x^*) + ES(x^*, y^*)$ $c_y(y^*)$
	does not fulfil y*	$c_x(\bar{x})$ $c_y(y(\bar{x})) + ES(y(\bar{x}), \bar{x})$	$c_x(x = 0)$ $c_y(y(x = 0)) + ES(x = 0, y(x = 0))$

Table 4.4: No equilibrium because of cyclical pattern

The analysis suggests it might be possible to obtain efficiency even if the information on the due care level is biased and, therefore, set suboptimal. Endres (1991) analyzed several different combinations of suboptimal standards and found that only in the case

of an excessively overstated care level on the intermediaries side, i.e. $\overline{x} >> x^*$ (Figure 4.3), efficiency can be restored when assuming a negligence liability with contributory negligence. Table 4.3 states the results of other combinations of given care levels briefly.

4.3 Court Cases

The previous section outlined the present liability rule and introduced economic considerations about the incentive structures of both the intermediary and the consumer. Without any failures, the negligence rule with the defense of contributory negligence yields efficient due care standards. As pointed out in subsection 4.2.2, the general functionality of negligence liability with contributory negligence is independent of whether the losses are shared or not. Additionally, a potential rate can be calculated in different ways and the final decision about the sharing of losses rests on the court. Due to those considerations, the analysis of the cases does not account for rates and focuses on the effects of liability rule failures instead. This section introduces twelve verdicts that are analyzed and tested on whether they provide evidence for liability rule failures. The twelve cases represent verdicts from regional and higher regional courts[16] in Germany and are publicly available via different online databases such as *dejure.org* or *beck-online*[17]. Thus, plaintiff and defendant are anonymous as are all witnesses; therefore, it is not necessary to pay attention to any further data protection issues. Due to de-personalization, the only distinction concerning the intermediaries' type is the one of broker versus agent. The agents are not further differentiated. All cases refer to § 63 VVG or the analogous § 43c VVG (previous version) as basis for a claim. These verdicts represent all cases that are decided and published based upon the "new" rules through December 2013. The "old" judgments on inefficient counseling include either only brokers, or refer to *culpa in contrahendo*; hence, a liability that refers to the process of contractual negotiation. In principle, the liability under culpa in contrahendo includes no counseling duties (Kieninger, 1998). But sometimes the courts stated exceptions and confirmed counseling and information duties. Kieninger (1998) summarizes those events and finds basically five categories of cases. The first category contains cases in which the consumers demanded complete insurance for a special risk, explicitly. Thus, a liability can be avoided if the counseling interview does not deal with those wishes and needs. In the second group, Kieninger (1998) summarizes cases that have wrong assumptions about either the insurable risk or the contractual benefits on the consumer's side in common. However, both aspects only become relevant if the consumer articulates a specific need. Without going into detail or further explanation of both the insurance coverage and the insurance conditions, the intermediary can circumvent the liability. The com-

[16] Regional Court = Landgericht (LG); Higher Regional Court = Oberlandesgericht (OLG).

[17] http://dejure.org and http://beck-online.beck.de; those databases publish all verdicts that are issued by courts. As soon as a higher judicial power overrules a verdict, the database deletes the former decision.

plexity of special aspects of insurance, such as the determination of certain sums insured (e.g. sum 1914 in residential building policies), leads to a third class of cases. Categories four and five contain claims with regard to false statements and cases in which the intermediary was in a proactive role. So, in order to prevent liability an intermediary should not state too many facts in detail. Following those remarks, Kieninger (1998) states that a liability under culpa in contrahendo sets wrong incentives and yields an inefficient allocation of risks. The present regulation aims for incentive compatibility by stating explicit duties in §§ 60,61 VVG and a corresponding mechanism of sanctioning. Therefore, the effect of the present regulation seems much more precise as far as setting incentives is concerned, compared with the liability under culpa in contrahendo.

For organization, categorization and codification of the verdicts, the scientific software Atlas.ti version 7.1. was used. The codes were generated according to the elements stated in the §§ 60,61 VVG which specify duties. Additionally, the element of contributory negligence was added. To identify failures, codes concerning the burden of proof, and the causality between a potential fault and the resulting damage were generated. Last, statements related to the care levels of both the intermediary and consumer were considered.
The remainder of this section deals with the analysis of different cases in chronological order. It is questionable if it is possible to find evidence for failures of the liability rule. Most important is the possibility that courts identify a breach of duty. This is perhaps the main question because the legal terms of §§ 60, 61 VVG have to be interpreted. The interpretation of the statutes, thus the definition of a to-be standard, might yield an overstatement or an understatement of the intermediary's due care level. Also, the plea of contributory negligence seems worth analyzing. Primarily, the care level that has to be provided by the consumer is important because it has to be determined by the judges as well. Therefore, this section seeks to answer the question, "Do the courts define optimal due care standards?" and, if not, is it still possible to restore efficiency. In order to answer these questions, the analysis focuses upon the consequences of the courts statements concerning the necessary care levels compared with the situation without any informational deficits. Therefore, the starting point of the analysis is always the efficient situation, followed by a deviation and the resulting consequences. In some cases the theoretical argument is illustrated by graphs[18].
Table 4.5 introduces the twelve cases briefly. The table states the file numbers as well as the facts of case. Additionally, the court decisions and the reasons are stated.

[18] In order to prevent repetition, case in which specific problems recur will be dealt with relatively short and without repeating the graphical analysis.

No.	file reference	facts of the case	reasons for decision
1	20 U 131/09 OLG Hamm (Decision: dismissed)	The consumer purchased a used RV (recreational vehicle), which was partially financed by way of credit during a four-year time frame. He demanded an automobile insurance policy from the insurance agent and ended up with a part insurance cover (sum insured: 21.000 EUR) and the mandatory auto liability insurance. Shortly after the policy was taken out, the RV was destroyed in an accident, which was not covered.	No counseling duties because automobile insurances are mass business and no complex products.
2	5 U 337/09 OLG Saarland (Decision: dismissed)	A self-employed manufacturer wants to change the conditions of his health insurance contract. As a result, the contract covers only the basic needs. Former sickness daily allowances are excluded. The intermediary took a note of no further counseling activities. Eventually, the manufacturer got sick and relied upon the daily allowances which had been excluded.	The explanation of changes concerning the insurance coverage was adequate. An exclusion of sickness daily allowances has the obvious effect that any those are no longer covered.
3	33 O 136/10 LG Ingolstadt (Decision: dismissed)	In order to update the insurance coverage on her residential building policy, the consumer switched to a more current tariff. During the counseling interview, the consumer stated her desired for information about the coverage of all water pipes because of the swimming pool in the backyard. Eventually, one of the water pipes in the backyard broke and the water caused 17.000 EUR worth of damage, which was not covered by the insurance company.	No counseling needed because the conditions are updated only. Additionally, a consumer can be expected i.e. to read the policy.
4	20 U 1643/09 OLG München	An insurance company did not compensate the consumer for a burned uninhabited building because the intermediary failed to mention a previous fire as well as a previous insurance for that residential building. The insurance company neglected the payments because of willful deceit.	The intermediary did not inform about relevant facts, such as the uninsurability of the uninhabited building.

No.	file reference	facts of the case	reasons for decision
5	5 U 502 10/76 OLG Saarland	Due to an advice, the insurant canceled his endowment life insurance (with tax privileges) and took out a pension insurance scheme. In the case of death his spouse should be entitled to benefit from the insurance. But, the intermediary chose a contract with the following specifications: entitled are only married partners as well as children and no sum will be granted in the case of a premature payment.	The intermediary must advise against any cancellation of a tax privileged life insurance scheme, must explain the costs of the cancellation, must explain that the spouse already benefits from the existing contract and must point out the difference between insurance schemes with and without payments in the case of a premature death.
6	12 U 56/11 OLG Karlsruhe	During a financial check-up the consumer, a student, was advised to take out disability income insurance as well as unit-linked life insurance. Both insurance contracts are sold as net policies. Additionally, intermediary and consumer agreed upon a remuneration contract. An existing pension insurance scheme incl. disability add-on was canceled.	The intermediary must explain the consequences of a cancellation of an existing contract and the risk of the unit-linked insurance scheme.
7	14 U 129/10 OLG Schleswig (Decision: dismissed)	A consumer demands insurance cover for the time of roof refurbishments. Above all, the insurance contract should cover damages resulting from heavy rain. Despite the placement of a tarpaulin the basic structure of the bungalow was soaked due to extreme rainfalls during the refurbishment. The loss was not covered because the intermediary chose a contract that did not include the “old” basic structures of the house.	The advice was wrong. But, the poor advice was not causal for the resulting damage because no policy would have covered the loss due to heavy rain.
8	10 U 724/11 OLG Koblenz	In order to participate in a tender, a company had to provide several insurances. The text for invitation to tender stated the required sum which had to be assured. Since the text was French, the intermediary chose a too low insurance coverage. Consequently, the tender was not accepted.	The duties of an intermediary do not diminish because of the foreign language.

No.	file reference	facts of the case	reasons for decision
9	16 S 46/11 LG Wuppertal	The consumer took out a unit linked life insurance scheme as well as an unit linked pension insurance to pursue a saving target. Both contracts were sold as net policies. An additional remuneration contract granted payments of 3203.40 EUR to the intermediary. Having lost her job as a nurse, the consumer was neither able to pay the premiums nor was she able to fulfill the payment plan concerning the remunerations. After five month, the insurances were canceled but the payment plan remained unaffected.	Net-policies don not represent the common remuneration for intermediaries. As a result, the combination of an insurance policy and an additional remuneration scheme has to be explained.
10	25 U 3343/11 OLG München	As a result of a counseling interview with an insurance intermediary, the consumer canceled his health insurance policy after 25 years in order to update the insurance conditions. Later, the consumer realized that the new contract changed certain conditions to the worse. Additionally, it was not possible to transfer the old-age reserves, which were to reduce the premium once the insured turned 65 years old. Thus, additional costs resulted from the worsened conditions and the loss of reserves to compensate an increase in premiums.	The intermediary must inform about the complex issue of transferability of old-age reserves. Additionally, it is necessary to explain the changed conditions.
11	11 U 907/10 OLG Brandenburg	A manufacturer, floor tiler and stove maker, demands professional indemnity insurance. After the counseling interview the cover note states "profession: stove maker/stove setter". After further inquiry, the intermediary adds "incl. floor tiling". However, the insurer did not recognize that endorsement. Therefore, the policy was not extended and a damage caused by water was not covered.	A broker must explore the risk actively and must provide adequate coverage.
12	18 U 114/12 OLG Hamm (Decision: dismissed)	The intermediary sells a funeral expense insurance and cancels an existing term life insurance at the same time. The spouse is supposed to benefit from the payment in the case of the consumers death. After the insurant died, the spouse realized that the indemnification pay resulting from the death benefit insurance is less than potential payment out of the term life insurance contract.	The intermediary is insurance agent so that he had neither a duty to capture the whole market nor to actively discover the consumer's risk.

Table 4.5: Court Decisions - Overview

4.3.1 Case No. 1

The consumer demanded insurance for a used RV, which he financed partially by way of credit. The agent sold partial insurance coverage and the mandatory liability insurance, exactly how a former recreational vehicle had been covered. Unfortunately, the RV was destroyed in a self-inflicted accident shortly after the policy was taken out[19]. The case was dismissed.

The court needs to state to-be standards in order to interpret the legal duties. The verdict states that the court does not assign any counseling duties to the agent in this case. The decision is justified by the facts that automobile insurance is not a complex product, nor was it the first time the consumer bought such insurance. Thus, the court defines a care level $\overline{x} = 0$ instead of x^* which represents the socially optimal level. Hence, the total costs reduce to the avoidance costs ($c_x(x)$); $\overline{x} = 0$ corresponds to point B in Figure 4.5a) that is located at the origin of the coordinate system.

Concerning the consumer's duties, the court decided that the consumer is conversant with the differences of partial and full coverage insurance, respectively. Furthermore, it is stated that the consumer did not react on the policy that affirms the policy conditions, implying that a consumer is obligated to read and understand the policy. In combination with the care level of $x = 0$, the negligence liability has changed to a victim liability in which the victim has to bear all costs (Adams, 1985). Thus, because the care levels are assumed to be substitutable, the consumer's total costs shift up and amount to $K_y^G(x = 0, y_1)$ as represented in Figure 4.5b). It is now individually rational to choose point D as it minimizes total costs. Nevertheless, y_1 as a reaction to $\overline{x} = 0$ exceeds y^*. In this case, it is irrelevant if the consumer fulfilled a given standard because the court decided that the intermediary is not liable, regardless of the action the consumer takes.

Generally, it can be assumed that intermediaries have a better knowledge about different policy types. Since credit financing usually calls for full insurance coverage, the counseling interview should include that issue. As credit financing could represent an instance in which the consumer might not consider the consequences, it does not seem feasible to expect counseling with no effects. Due to the assignment of a suboptimal care level which resulted in victim liability, the intermediary had no incentive to choose the socially optimal level. Therefore, if consumers anticipate courts will hold them responsible in any case, the liability rule fails because the intermediary's care level is too low and the resulting care level of the consumer will generally be too high.

4.3.2 Case No. 2

The consumer, a self-employed manufacturer, held a health care insurance policy as well as insurance to cover daily allowance in case of sickness. Because of an increase in premiums, the consumer contacted the broker and demanded a change in insurance conditions that would result in lower payments. As a consequence, the consumer took

[19] 20 U 131/09 OLG Hamm; 12/04/2009

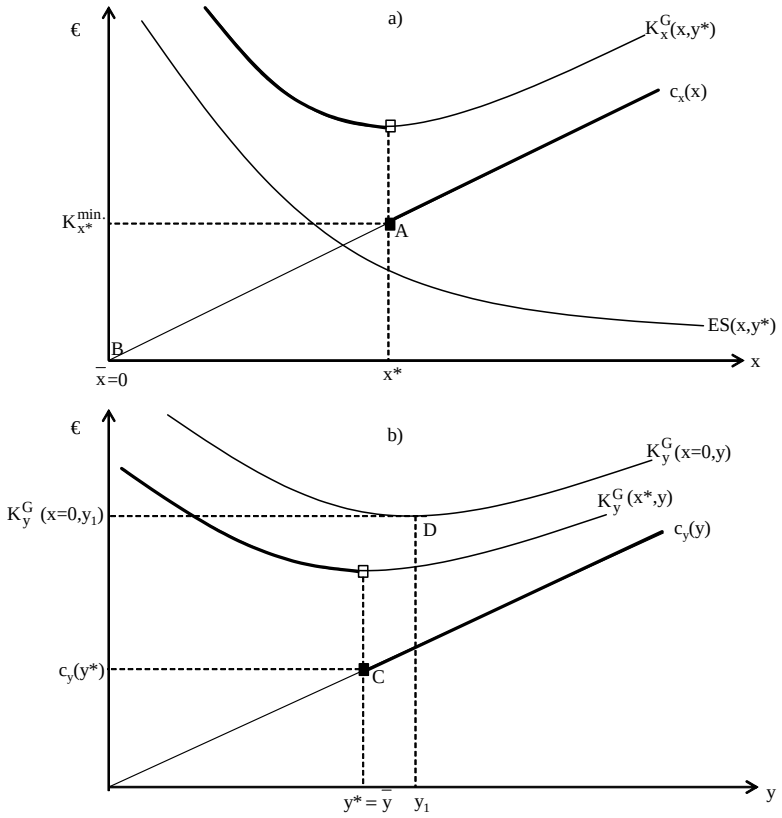

Figure 4.5: Victim's Liability

out a new contract that only provides basic coverage and excludes any daily allowance for sickness; the premium was reduced by 266.81 € per month. Later, as the consumer became sick and realized the coverage for daily in case of sickness had been excluded from his new contract. The case was dismissed[20].

In this case, the court stated the to-be standard as follows: the intermediary has to inform the client about potential risks that result from a downgrade in insurance coverage. Referring to the consequences of a cancellation, however, no further advice is required because the insurance contract obviously expired, as did the promised coverage. The information about risks concerning the downgrade does not ask too much of an intermediary because he is considered an expert in insurance matters. So, the verdict provided evidence that the broker's care level is not estimated incorrectly. What about the imposed requirements on the consumer? Are they too demanding? First, the court expects the consumer to realize a canceled contract does not provide any further indemnification payments. Indeed, that requirement does not ask too much. However, the court also requires the consumer to read the policy and documents associated with his insurance coverage. In contrast to the first argument, it is more likely that the to-

[20] 5 U 337/09 OLG Saarland; 01/27/2010

be standard a consumer should adhered to is overextended in the second requirement. However, the consumer is a self-employed manufacturer who knows about the importance of daily sickness allowances and is used to reading and understanding commercial correspondence. Therefore, the verdict does not provide evidence for any mistake by the court. Since there are no mistakes that might induce a deviation from the efficient care levels, no graphical analysis is needed.

4.3.3 Case No. 3

Because of the swimming pool in her backyard, the consumer put emphasis on the insurability of water pipes. In order to update the conditions of the residential building policy, she switched to a more current tariff. The intermediary's answer to the question concerning the inclusion of water pipes reads as follows, "All water pipes are covered." Later on, a rain drain and two mix-water pipes broke and caused a huge amount of damage. Contrary to the consumer's expectations, the loss was not covered. The court dismissed the case[21].

The court noted the answer to the question about the inclusion of all water pipes was wrong. Nevertheless, it is also stated that the intermediary was not obligated to any advice given since the interview dealt with an update of conditions only. As to the court's argumentation, counseling duties merely arise in the case of "new" contracts; updates are foreclosed. Furthermore, the consumer should neither demand information about the single rules and regulations of the agent, nor can she reasonably expect the intermediary to extend the coverage beyond the policy. Indeed, the court wants the consumer to read the policy and to figure out the included and excluded damages. Above all, it is expected that consumers reflect about efficiency considerations because, from the insurer's point of view, some damages cannot be covered in a cost-efficient way, including rain drains.

Returning to the point that the court does not assign any duties to the agent, because the contract in question represents an update only: hence, the court assigns a care level $\overline{x} = 0$. As in case No. 1 (Subsection: 4.3.1), the consumer has to bear all costs and is held liable regardless of whether she is careful or not. In this case, it is questionable if the agent has to correct the wrong assumptions about the degree of coverage even though the contract is not "new". However, the verdict draws the attention to another aspect that seems worth noting, the expectations about the knowledge and actions of the consumer. As already mentioned, the consumer has to figure out inclusions and exclusions. Additionally, it is expected that the consumer interprets the agent's statement correctly, as for example the comment on the coverage of the pipes, which was, obviously, not correct. In order to comply with those expectations the consumers need a profound knowledge of insurances in general and special know-how concerning residential building policies. Without expert knowledge, it is doubtable the consumer can perform the necessary action at reasonable costs. Thus, the actual avoidance costs

[21] 33 O 136/10 LG Ingolstadt; 12/29/2010

are higher than assumed in the verdict. Figure 4.6 shows one possible effect of an underestimation of consumer avoidance costs, but depending on the intensity of the effects other outcomes might result, starting with a situation in which both consumer and intermediary choose the efficient care standards (x^*, y^*) that correspond to point A and B in Figure 4.6a) and b), respectively. As stated in the verdict, the avoidance costs are underestimated, yielding a suboptimal care level $\overline{y}$ which corresponds with point C in Figure 4.6b). It can easily be seen that the resulting avoidance cost in C are higher than the total costs in B; therefore, it is individually rational to select B, thus ignoring the requested care level $\overline{y}$. By ignoring the stated standard, the individual chooses the efficient care level, which minimizes social total costs. The consumer's choice, however, excuses the intermediary from liability in this case. Consequently, the agent minimizes his avoidance costs and selects point D $(x = 0)$ in Figure 4.6a). Since the care levels are assumed to be substitutable, the total costs K_y^G increase. Thus, the consumer has to compare the costs resulting from point E with the cost at the care level $\overline{y}$. In this case, the consumer still prefers to override the care level and pick E. The intermediary is still not liable because $y_1 < \overline{y}$ and does not adjust his actions. The resulting equilibrium is $x = 0$ and $y_1 > y^*$, hence inefficient. Of course, the result is driven by the intensity of the effects; therefore, the question if it might be possible to reach efficient equilibrium becomes important. The answer to that question is no. The analysis results either in a circular argument, or in too much care on the consumer's side.

4.3.4 Case No. 4

The consumer requested insurance for a residential building, a house, which needed redevelopment and therefore was not permanently occupied. Three months before the insurance contract was signed, an adjacent building burned down. The broker who filed the form did not mention an existing previous insurance contract, nor did he mention the fire. When the main building caught fire the same year, the insurance refused the payment due to willful deceit.[22].

In this case, it was quite obvious the court expected the broker to act as a stakeholder for the consumer. As the broker completed the application form, it is his fault that neither the previous insurance contract, nor the fire were mentioned. Thus, the court expected the broker to fully inform his potential insurance client about the risks and other relevant circumstances associated with the application. The question became, did the broker have knowledge about those issues? If not, was it expensive to discover the relevant information? Despite the fact that the consumer informed the broker about the previous loss and the other insurance policy, an on-site inspection would have made the fire evident because of the ruined building. This brings us to the court's stated expectations respect to the consumer: the obligation to provide information. Of course, the consumer is expected to make private information available to the broker. Both the

[22]20 U 1643/19 OLG München; 03/09/2011

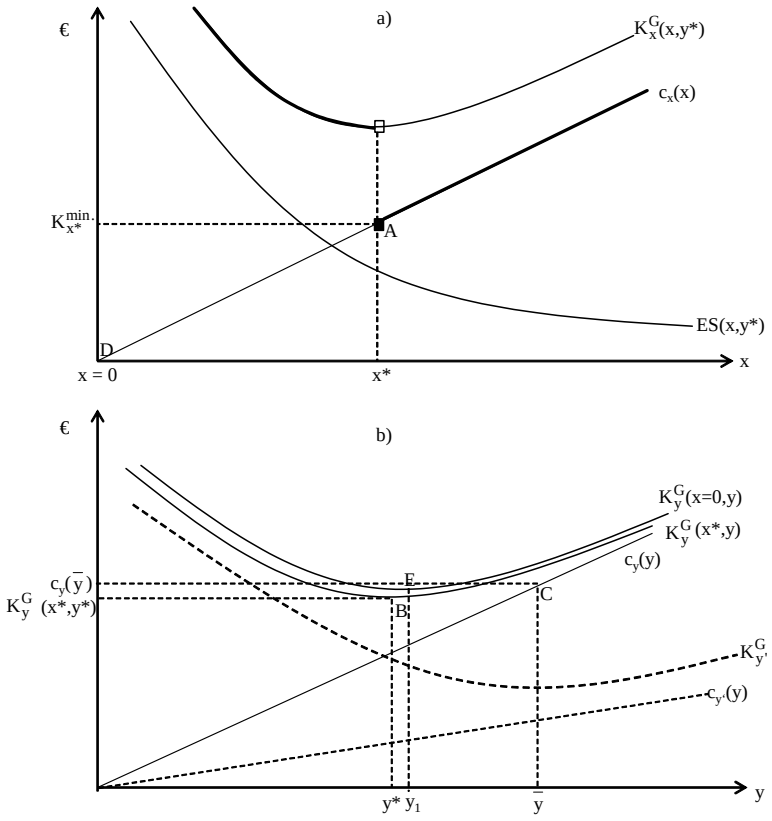

Figure 4.6: Underestimations of consumers' avoidance costs

previous fire as well as the former policy were pieces of private information the consumer was aware of. Since the application dealt with those aspects, the consumer knew of their importance. Therefore, the court does not hold the consumer responsible to mention extraneous private information because the application asked for the information.

4.3.5 Case No. 5

In this case, the consumer canceled a tax privileged, long-term life insurance contract and took out a retirement insurance scheme. He is not married, and has no children. Unfortunately, the contract the intermediary provided does not fit the consumer's situation because only a married partner or the consumer's children could be entitled to receive benefits upon the consumer's death. Also, any premature payments are excluded. The court granted the claim[23].

The court stated the to-be standard as follows. The intermediary must consider the individual and financial situation of the consumer. Furthermore, the consumer has to be informed about the financial disadvantages resulting from the termination of the life

[23] 5 U 502 10/76 OLG Saarland; 04/13/2011

insurance contract. Since the "old" contract was endowed with tax benefits, the intermediary must provide information about the changed rules because "new" contracts do not include such benefits any more. Additionally, the consumer needs to know the differences concerning termination and potential cash-in values (Ablauf- und Rückkaufswert) of both contracts. It is the intermediary's duty to provide that information, as well as the information about payments in the case of death with respect to the different stages of the contract, i.e. prior to the pension payments (deferment period), or during the payment period. By stating those requirements, the court has to consider the intermediary's avoidance costs as well as the consequences of poor counseling in terms of expected damages. As far as avoidance costs are concerned, the court must evaluate the difficulty of gathering and providing relevant information from the intermediary's point of view.

First, in the consumer's case, the tax benefit is valuable because of a high wage tax classification for unmarried employees. To reveal someone's civil status is neither difficult, nor costly. Therefore, it can be expected that an intermediary would seek information on the marital status of the consumer. Second, the circumstances of tax privileges are known by the intermediary because the written verdict states the retirement insurance scheme was primarily suggested because of that detail. Hence, the requirement to be informed about the individual and financial situation of the consumer does not represent an excessive demand. Also, an intermediary as an expert in insurance matters knows about the financial disadvantages of the termination of long-term life insurance contracts. He is obligated to explain the calculations of potential surrender values (Rückkaufswert), at least to inform about deductions resulting from the coverage of commissions and administrative costs. Since the intermediary receives the commissions, it is feasible to expect him to know that those are covered with the first premium payments. The third requirement states that the intermediary must inform the consumer about the different stages and periods of insurance contracts. Of course, this knowledge is considered to be expert know-how. However, the general distinction of deferment period (Aufschubzeit) and the period in which the actual pension is received is inherent to pension insurances in general and not a special characteristic of the specific situation. Thus, it is not costly to provide that information. Last, the spouse could not be entitled to receive the payments because the contract must meet the requirements of the *Income Tax Act* that excludes that possibility. Again, that detail is not contract specific and, therefore, part of the expert's knowledge. Thus, as far as avoidance costs are concerned, the court did not overburden the intermediary.

Next, the court also has to determine the effect of different care levels and resulting expected damages. The court mentions the consequences of the advice as follows: additional administrative costs, no refund in the case of death during the deferment period, and no possibility to entitle the spouse to the pension payments. In addition to the losses from the cancellation of the contract, the court considered the relevant facts to calculate the damages. Finally, turning to the possibility of contributory negligence on part of the consumer, the verdict does not provide any evidence about a potential fault

in this case. However, it is stated that the insured is obligated to read the policies and insurance conditions, but the court also noticed the difficult matter of taxes, survivor's benefits and long term insurance policies in general.
Figure 4.7 summarizes what happened in this case. The intermediary did not fully rec-

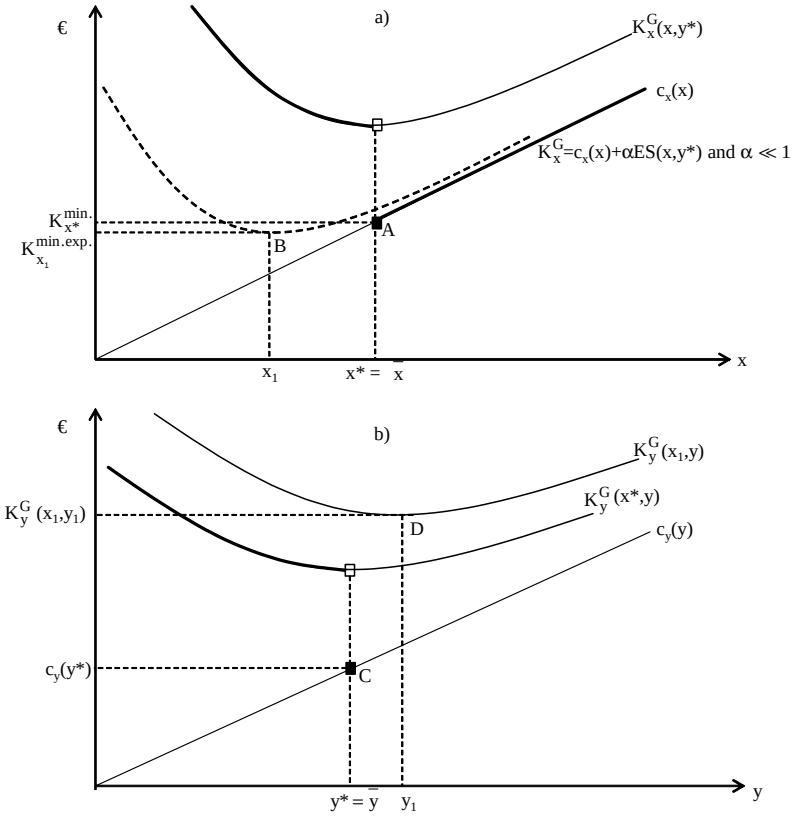

Figure 4.7: Underestimation of expected damages

ognize that the consumer wanted financial security for himself once he retires, but also a survivors' benefit for his unmarried partner. The verdict provides evidence that from the broker's point of view, the main focus of attention was on the pension claim for the insured. Therefore, the broker underestimated the consequences of that detail which results in a downward shift of the expected damages. From the intermediary's point of view, it is rational to choose point B instead of A if the underestimation of losses is large. If the consumer does not expect the court to correct the underestimation, it is optimal to choose D because of the assumed possibility to substitute one care level for the other which shifts the total cost curve upwards. In this case, however, the court corrected that error and the broker is held liable because $x_1 < x^*$. Due to this correction, it is now optimal for the consumer to choose C instead of D which minimizes the total cost if the consumer. All in all, the liability rule worked but the intermediary underestimated the losses.

4.3.6 Case No. 6

During a financial check-up the consumer, a student, was advised to take out a disability income insurance as well as a unit-linked life insurance policy even though consumer already owned a pension insurance scheme with a disability add-on. The intermediary advised the client to cancel the existing policies. In contrast to the prevalent remuneration system, the two contracts were sold as net-policies (Nettopolicen), hence, without commissions. Additionally, a payment contract was drawn up to cover the intermediary's expenses. Later on, the consumer realized that she lost about 2.800€ because of the low cash-in values of the canceled policies. Furthermore, the "old" contract was tax privileged. The court granted the case but obligated the consumer to take out a policy comparable to the canceled contract[24].

The verdict focuses upon two different issues. First, the court had to deal with the advice given concerning the insurance policies. Second, the information about the additional payment contract was questionable[25]. Concerning the insurance policies, the court states a broker has to inform clients about costs and benefits resulting from cancellation of current policies. As soon as alternative products are presented the broker has to present similarities and differences in detail. On the contrary, the consumer is not obligated to know the extent of economic consequences. Are the due care levels over-predicted or under-predicted? Is a broker able to present the costs and benefits of a cancellation in a way that a consumer can assess the economic consequences? Furthermore, can a broker provide information at reasonable costs? If not, the court would underestimate the broker's avoidance costs. In order to know about losses concerning potential surrender values of insurance policies, the broker has to be conversant with the calculation of administrative costs especially in the field of personal insurances. Since those costs also include commissions paid to compensate the intermediary's work, it can be expected a broker informs his client about several deductions from the first few payments. Of course, costs are also relevant when canceling a contract. Therefore, the inversion of the previous argument results in an obligation to inform the consumer about consequences of premature payments resulting from the deductions of commissions and administrative costs from the first couple of payments.

As far as the consumer is concerned, it is questionable to reasonably expect she knew about the losses incurred with premature cancellation of personal insurance contracts. The verdict states the consumer was aware about potential deductions; however, she did not realize the actual amount lost due to administrative costs and commissions. Importantly, the court states a consumer does not need to know the precise loss amount, however, a consumer must be informed about losses resulting from cancellation in general. Additionally, the fact that intermediaries earn money by selling insurance policies supports the previous statement, especially because the court views the commission fac-

[24] 12 U 56/11 OLG Karlsruhe; 09/15/2011

[25] Since the paper deals with miscounseling in insurance matters, the analysis will concentrate on the advice that is concerned with the insurance policies, only.

tor to be common knowledge. Indeed, consumers cannot reasonably expect an advice for free. To summarize, the court only demands general knowledge about usual compensations schemes as well as general knowledge about usual payment terms, hence the defrayal of commissions and other costs out of the first premiums paid.

4.3.7 Case No. 7

The next case concerns an insurance contract for a consumer who planned to convert a bungalow and refurbish the roof. Since the bungalow would be without a roof for a time, he had to consider the danger of heavy rain. Therefore, the consumer demanded an appropriate insurance policy to cover losses that might occur to the furniture, walls and flooring materials. However, the chosen insurance policy did not cover losses of the old structure of the bungalow, thus sustained damage due to rainfall was not covered. The court dismissed that case[26].

The court states the to-be standards according to a judgment known as the "trustee decision"[27]. The broker has to deliver a suitable insurance coverage to meet the consumer's wishes and needs. In this case, the broker had to search for an insurance to cover damages due to rainfall at the replacement value. According to the requirements, the court states there was a counseling failure. Therefore the court did not overestimate, or underestimate, the care level. As long as it is possible to evaluate the risk and find an adequate coverage, or to provide the information that no such coverage exists, the broker is able to meet the requirements. In this case additional agreements to include damage at the buildings structure are quite usual.

However, the court decision draws the attention to another aspect since the broker was not held liable even though the advice was found lacking. As the insurance was supposed to cover damages resulting from extreme weather conditions, loss due to usual rainfall is not insured. Thus, the cause-and-effect link between poor counseling and the loss is missing since damages due to regular weather conditions do not represent an insured risk. Therefore, wrong advice was not the reason for the omitted indemnification. A missing causality might affect the individual's behavior because it can yield an underestimation of expected damages as already pointed out in Section 4.2.2. Since insurance coverage that includes extreme weather conditions is more expensive, than coverage that excludes those events, it is easier to sell the "regular" coverage. Therefore, if the missing causality is a major issue in many losses resulting from rain, the intermediaries might tend to underrate the expected losses, in particular if in the majority of the cases the weather condition itself is the crucial issue. The tendency to underrate the losses is because of the expectations that a missing causality will reduce the number of cases in which poor counseling yields liability. The corresponding effects are shown in Figure 4.8

[26] 14 U 129/10 OLG Schleswig; 09/16/2011

[27] Federal Court of Justice (of Germany) 5/22/1985 IV ZR 190/83)

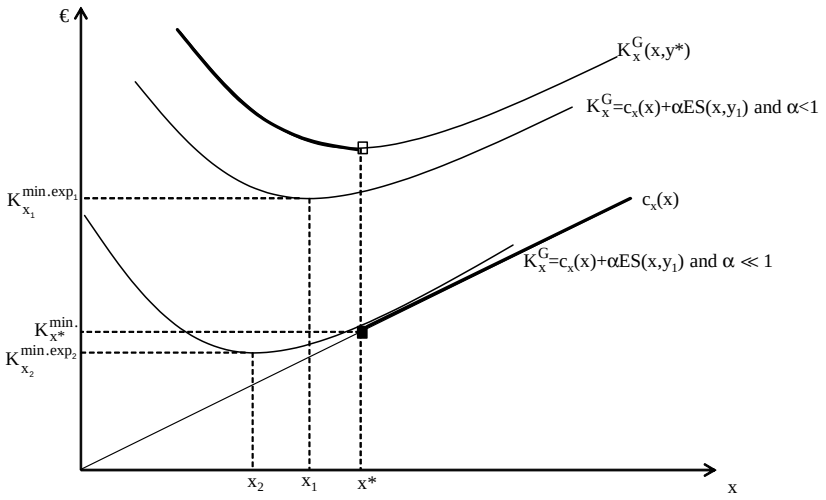

Figure 4.8: Discounting expected damages

Figure 4.8 is already introduced and explained in Section 4.2.2. The intermediary forms expectations about the resulting losses that might have to be covered in case of poor counseling. If those expectations are now not objective but calculated upon an assumption that includes "times being caught" the expectations represent an average valuation of damages. Therefore, the intermediary might choose a care level that falls below the efficiency level x^*.

4.3.8 Case No. 8

A firm wanted to bid on a public construction project and had to provide proof of insurance covering risks for a specific amount. In order to provide insurance, the company relied upon the services and knowledge of a broker who gave the impression he was conversant with the matter of construction and building risks. Because the tendered documents were written in French, the broker's employees misunderstood the amount and content of the necessary insurance coverage. The construction firm's bid was not considered for the bid because the documents were incomplete. However, it turned out their bid would have been accepted if it were not for the missing insurance. Even though the broker argued that knowledge about foreign insurance law as well as the ability to translate the documents from French to German overstates the care level, and cannot be reasonably expected, the court held him liable [28].

The court expected the broker to inform his customer about his inability to provide the requested information based upon the provided documents. There was no exception or limit on the range of duties required of the broker due to language barriers or foreign rules. As far as the customer's side is concerned, the court states the expectations to

[28] 10 U 724/11 OLG Koblenz; 10/17/2011

provide all relevant information. In the present case, the customer supplied the broker with everything. However, additional information was available to the construction firm that they did not presented, but might have been helpful in that it could have clarified requests. In this case, the court determined the care levels without any evident mistakes. The broker did not inform his customer about the inability to provide the requested coverage even though he received all relevant information but could not translate the documents properly. It is not too much to require of the broker since he could have asked his client to translate the documents, or hire a professional translator. On the consumer's part, the court expected him to provide all documents, which he did. Similar to the determination of the broker's costs, the requirement to provide all documentation did not overstate the avoidance costs in this case.

4.3.9 Case No. 9

In this case the intermediary was the plaintiff and the insured was the defendant, making the role distribution slightly different than in the other cases. The analysis and argumentation remains unchanged since the court's main concern in the case was the determination of care levels.
The agent sold unit-linked life insurance as well as unit-linked pension insurance as net-policies together with an additional payment contract to secure the agent's remuneration. At that time, the consumer earned about 500 € as a nurse. The consumer became unemployed five months after the insurance contract concluded, and the contracts were canceled; however, the remuneration contract remained untouched. The court granted the case[29].

How did the court state the to-be standards? What costs does present verdict refer to? First, starting with the requested care level of the agent, since net-policies with additional payment contracts represent an atypical form of agents' remunerations, a duty to counsel exists. In particular, it is important to note that the payment contract was distinctly separate from the insurance contract, so even if the consumer canceled the insurance policy the remuneration contract remained in place, and the agent's avoidance costs are affected. By offering net-policies, the agent realized his remuneration had to be paid separately. In this case, the agent sued the consumer for the debt, even though the insurance contract was canceled. Thus, the intermediary was aware of the persistence of the additional contract. Second, the verdict addresses the consumer's awareness of net-policies and the resulting difference in remuneration payments. The court stated the consumer did not need to be conversant with the consequences of payment contracts since those represent an atypical form of remuneration. Of course, the inversion of the argument yields that consumers are aware of the remuneration of brokers and agents in general. Using this as a starting point, the court did not over assess the avoidance costs of the consumer because it can be reasonably expected that consumers know intermediaries

[29] 16 S 46/11 LG Wuppertal; 04/03/2012

are paid for advice via premium payments. However, the consumer cannot be expected to know about or understand that the atypical contractual obligation requires her to pay remuneration regardless of the existence of the insurance contract.

4.3.10 Case No. 10

A consumer canceled his private health insurance, including nursing care, after almost 25 years in order to take out a new contract. Only after the consumer received the information that a small amount of his old-age reserves could be transferred into the new contract, he realized his coverage had changed for the worse. The case was granted[30].

Whereas, the regional court did not hold the intermediary liable, the higher regional court decided in favor of the consumer. The court defined the to-be standards as follows. First, the intermediary must recognize the need for counseling advice. Second, the differences between the old and the new insurance conditions have to be analyzed and shall be communicated. Additionally, the agent must provide information about the non-transferability of the old-age reserves as well as information about the resulting economic consequences. Last, the agent has an obligation to expose gaps in coverage. In comparison, the consumer fulfilled his duties by handing the relevant documents to the agent. In addition, the court did not hold consumer responsible to double-check the agent's advice. Quit rightly, the judges recognized the complex matter of this kind of insurance.

In contrast to the regional court, the higher court realized the consumer is suffering, or will suffer a loss in the future because of the advice he received from the broker. Whereas the regional court underestimated the expected damages and ended up applying a care level, which was too low compared to the optimal one, the higher regional court identified the damages that occur today and will occur in the future. For example, the new contract does not cover a treatment by a head physician nor does it cover a private patient suite. Those losses evidently occur today. The non-transferability of the old-age reserve represent damages which will be noticeable in the future but still have to be considered when determining the care level. Thus, the higher regional court corrected the underestimation of expected damages by the regional court and solved the problem of a suboptimal care level.

4.3.11 Case No. 11

In order to cover risks from his profession as a stove maker and floor-tiller, the consumer wanted to take out new professional liability insurance because the old one ended. As a result, the broker suggested a policy that covered risks of manufacturing companies and especially those related to stove making. However, after signing the contract the consumer noticed floor tiling was not mentioned explicitly in the policy. He informed

[30] 25 U 3343/11 OLG München; 06/22/2012

the broker about that mistake and believed the problem would be solved as a result of his complaint. Shortly after the policy was taken out, the insured was held liable for damage by water that occurred in the aftermath of his work as a floor tiller. Because the profession was still not included in the policy, the insurance company refused the payment. But, the court granted this case[31].

The court affirmed the liability of the broker in this case because he neglected his duties, which are stated as follows. The broker must evaluate the risk individually and self-initiated. Furthermore, any gap of insurance coverage must be mentioned. In this case, the missing liability coverage for risks due to tile setting must be detected and abated. It is questionable if the broker had knowledge of the additional professional activities other than stove making. Since the client's letterhead reads "Fireplaces and Tiles" and the old professional insurance policy included both professions, it is expected that the broker ask about the actual activities performed by the insured. Because of the complex matter of professional liability insurance, the court did not assign any duties to the consumer. Also, the relationship between broker and consumer is such that the insured can rely upon the intermediary's statements. Importantly, the court did not explicitly state a duty to give any information to the broker about the floor tiling activities, even though the consumer did so in the present case. Thus, the courts argumentation requires the broker to be informed, but on the other hand did not require general information to be submitted on the part of the consumer. Hence, it can be argued that in general the broker has to ask the consumer about his profession. The obligation of the client to provide information becomes relevant when the broker clarifies the client isn't building stoves with tiles, but that he, in addition to installing stoves, sells floor tile-setting services. It cannot be expected for a broker to realize both professions are carried out independently. Consequently the general statement a consumer has no obligation to fully inform the broker about all activities and services, result in a care level that is too low. Since the provision of that information is nearly priceless, the court overstated the avoidance costs. This case, therefore, represents a situation in which the care level of the consumer is too low, $\overline{y} < y^*$, and the care level of the broker is overstated, $\overline{x} > x^*$. This situation is depicted in Figure 4.9 by the broken lines in comparison to the socially optimal care levels x^* and y^*.

What is the result of such a setting with regard to the formation of equilibrium? Hence, it is a question of the existence of equilibrium in general. In addition, is the comparison to the equilibrium considered socially optimal? First, let's consider the broker's reaction. Due to an overestimation of avoidance costs, the required care level exceeds the optimal one. Depending on the degree of the over-assessment, different reactions become possible. First, let's assume the required standard exceeds the optimal one, but still falls below point A in Figure 4.9, so that $c_x(\overline{x}) < K_x^G(\overline{x})$. As long as the inequality holds, the intermediary will fulfill the required care level. Because of the substitutability of care levels, the consumers' total costs shift down (Figure 4.9b)

[31] 11 U 907/10 OLG Brandenburg; 10/23/2012

and the best response to $\overline{x} > x^*$ is $y_1 < y^*$, point B [32]. However, as long as $y_1 > \overline{y}$, the broker is liable for not meeting the given standard and has to take all costs into account even though the stated care level on the consumer's side falls below the optimal one. Therefore, it is always optimal to fulfill the standard $\overline{x}$. To summarize, in this setting equilibrium is reached in which $\overline{x} > x^*$ and $y_1 < y^*$. The second possibility of reactions is quite similar to the first one, but results in a cyclical pattern of adjustments. Assume that because of the substitutability of x and y, the consumer's best response to $\overline{x} > x^*$ is still $y < y^*$ but now $y_2 < \overline{y}$[33]. In this situation, the broker is no longer liable and, therefore, it is optimal to minimize avoidance costs. Hence, the broker has an incentive to choose $x = 0$. With $x = 0$, the consumer minimizes total costs and chooses $y(x = 0) > y^* > \overline{y}$. But, since the court determined a standard $\overline{x}$ that is fulfilled by the broker, the cycle restarts. In a third setting, the stated care level $\overline{x}$ overshoots the optimal level to a great extent so that $c_x(\overline{x}) > K_x^G(\overline{x})$. Under these circumstances it is optimal for the broker to choose x^* and consider total costs. This is the case in each care level that exceeds A in Figure 4.9a). The best response to x^* is y^*, but the consumer is compensated as well if he chooses the suboptimal $\overline{y}$. Since the consumers' avoidance costs have a positive slope throughout, he minimizes costs by choosing the suboptimal care level. However, as long as the broker has to compensate the consumer the best response is always to select x^* under the given circumstances. The resulting equilibrium is not the efficient one because the consumer's care level will be too low.

4.3.12 Case No. 12

Initially the consumers, an elderly couple, contacted the agent in order to take out a supplementary dental insurance. During the counseling process the consumers gave all of their insurance documents to the agent for analysis. As a result, the agent recommended the couple purchase insurance to cover funeral expenses; at the same time, he helped them cancel an existing term life insurance. The man died in the following year at age 74 and the insurance paid 1.833,67€ to the widow, a sum about 13.500€ less than the value of the canceled term life insurance. Primarily, the court deemed the widow was not in a position to contest a counseling mistake as she was a beneficiary of the contract, and the court dismissed the case.[34].

Nevertheless, the court mentioned requirements that refer to both the care level of the agent as well as the care level of the consumer. First, the analysis of insurance documents did not include any concrete counseling advice. The agent did not call upon special trust because he did not act especially on behalf of the consumer. The agent's advice resulted in the substitution of term life insurance with insurance to cover funeral expenses, but the term life insurance would have covered those costs as well as what the widow was entitled to. To substitute one for the other in the contract caused additional costs because of

[32] Recall that the intermediary is not liable, thus, the consumer won't be compensated.
[33] In Figure 4.9 this case is indicated by y_2 that is located somewhere below $\overline{y}$.
[34] 18 U 114/12 OLG Hamm; 05/06/2013

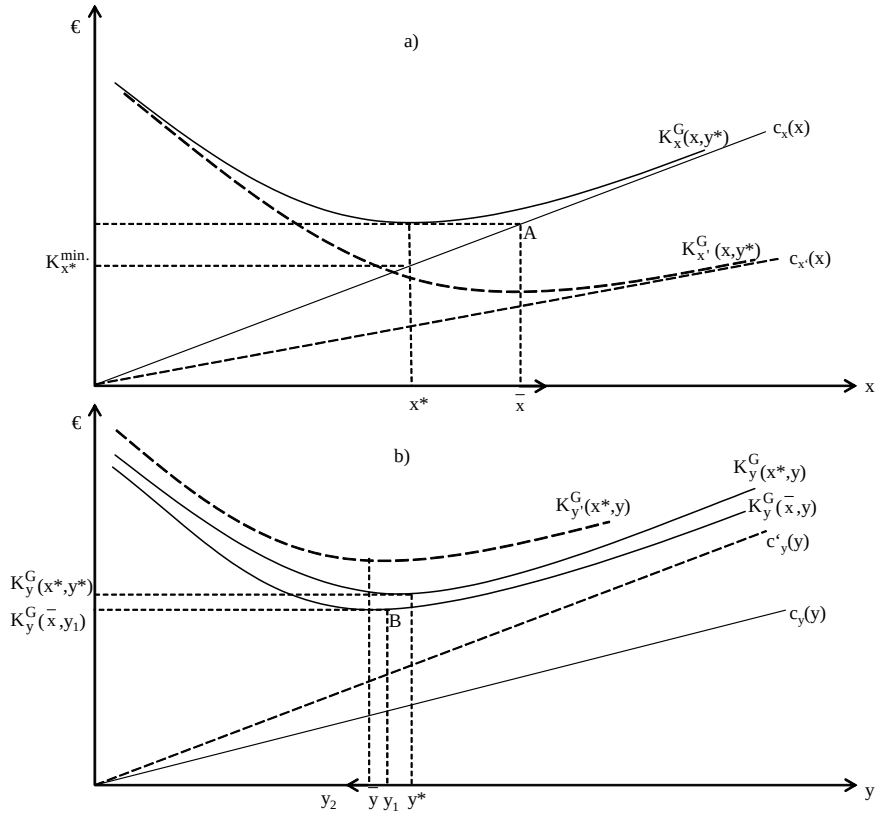

Figure 4.9: Overestimation x along with an under assessment of y

commissions and administrative fees, thus the funeral expense coverage was a costly alternative. The consumer would have been better off without the advice. The court did not recognize the underestimated losses which resulted from the agent's poor counseling. The expectation on the consumer's care level was the following. Implicitly, the court stated a consumer has to read documents before signing them. The widow stated she trusted the agent and therefore signed the prepared documents without reading them. Furthermore, the couple followed a newspaper advertisement to contact the agent for advice on dental insurance and they must have realized that he only specialized in selling products of one type of insurance, dental. Thus, the court assumed the consumers could distinguish the intermediaries by type with all the consequences.

Therefore, the court underestimated the care level of the agent. In the case of the elderly couple, the court's assessment of their responsibility was too high because the cost to collect information about the intermediary's type was high. Hence, the analysis of this case is similar to Case No. 3. If one assumes it is common knowledge to know the difference types of intermediaries, and therefore no overestimation of avoidance costs happens, the socially optimal equilibrium can still not be reached because of the underestimation of the expert's care level. The best response to $\overline{x} < x^*$ would be

$y_1 > y^*$.

4.3.13 Discussion

The main question of this section was do the verdicts provide evidence for failure of the liability rule. The decision about care level is especially a major issue because the courts are deciding how to interpret legal terms. As the analysis shows, the answer is ambiguous. Basically, verdicts are based on the presentation, description and information of costs and benefits. Of course, this statement is fairly aggregated. The costs can be further divided into losses that result from cancellation of an existing contract and costs that directly arise from the selected contact such as premiums or the intermediary's remuneration. For example, in Case No. 1 the financial situation of the consumer is such that a cancellation of the existing tax-privileged life insurance contract was not advised. Also, in Case No.4, the court states negligence because the intermediary did not inform about all consequences, financial and fiscal, that result from a change of insurance policy and company. Likewise, the jurisdiction expects the intermediary to advise against the replacement of a health insurance contract if existing old-age reserves cannot be transferred, which would result in an increase of future costs (Case No. 7). As far as the remuneration is concerned, the intermediary has to inform about any agreement that differs from the traditional compensation scheme (Case No. 10). When it comes to the benefits of insurance policies, the intermediary is expected to know all benefits and exclusions of the insurance policy he sells. Additionally, he has to share the information with the consumer in an adequate way, which definitely excludes a simple presentation of the product information sheet (Case No. 4). Furthermore, being an expert, the intermediary is supposed to recognize and inform about obvious gaps in coverage.

Are the expectations overstated? The first section discusses due care levels that are too high as one out of several reasons for the failure of the liability rule. Considering an information-based error term, it is important for the intermediary to be able to obtain the necessary information on costs and benefits easily and at reasonable costs. Being an expert, the intermediary has the ability to inform the consumer about the consequences that result from the replacement of contracts. All stated examples do not require knowledge or information that is not available, or is disproportionately costly to gather. Differences between life insurance policies or the possibility that the tax status of older contracts is preserved does not represent a challenge to an expert in insurance matters. Taking the general availability of information as a granted, one might ask why the jurisdiction denied liability in some cases. Perhaps the due care level is understated. In that case it would be cost minimizing for the intermediary to fulfill the required level $x < x^*$ although the socially optimal level is not met. For example, in Case No. 2, the court deemed the intermediary faultless because it is assumed that the consumer knew the differences between possible automobile insurance policies, even the fact that the RV was partially financed did not trigger an intermediary's duty to counsel according to the courts. On the other hand, from the intermediary's point of view it would be easy

to gather and process information about the difference in policies as well as information about additional risk that arises from credit funding. Therefore, it is expected that he share that information with the consumer. The requirements stated by the court therefore represent an understatement of the due care level. In Case No. 3, the court denied the right to compensation because the consumer only demanded an update of an existing contract, regardless that specific questions concerning the coverage of water pipes remained unclear and unanswered. As in the previous case, the requirement to inform about exclusions from insurance coverage is understated because the consumer erred in understanding the insurance terms. Since the stated exclusions represent common standards the consumer's mistake is obvious. It is expected that an intermediary clarify the conditions.

§ 254 BGB constitutes a contributory negligence that has to be considered. The question is, "To what extent is the consumer at fault concerning the damage that occurred" The first distinction is a rather simple one. Contributory negligence is explicitly mentioned in some cases in which the court states, "The insurant may trust the intermediary's statements" However, the verdicts also points at some general expectations the consumer must fulfill. Thus, without explicitly referring to the standard of contributory negligence, the jurisdiction implicitly states the consumer's due care with respect to the level of information giving and information gathering. First, the courts state the expectation that the consumer read the send documents that include the General Conditions of Insurance (GCI), the insurance policy or the documentation of the counseling interview itself. Admittedly, the courts distinguish between the complexities of the products. For instance, in Case No. 1 the court required a consumer read the GCI, but not if those conditions are as complex as the present ones. On the contrary, automobile insurance is considered highly standardized; therefore, the court assumes some reasonable knowledge about those contracts. Additionally, it is assumed consumers have information about the prevalent rules and standards of certain insurance plans. For example, the insurant has to provide usual preventive measures of rain coverage if the roof of a house is reconstructed (Case No. 6). Whereas it is assumed that the consumer has knowledge about the traditional remuneration schemes (Case No. 4), a consumer is not at fault if he does not know the concept of net-policies and an extra compensation contract (Case No. 10). Furthermore, the provision of information by the consumer is another objective. In Case No. 9, the insurant has to bear a contributory negligence because he did not yield all printed forms of a bidding procedure to the intermediary, but by handing all relevant insurance documents to the agent, the consumer expects the necessary information will be extracted as stated in Case No. 7.

To summarize, the cases provide some evidence that courts tend to understate the care level of intermediaries. The source of the rule failure is either an underestimation of losses or an overestimation of avoidance costs. As the analysis of the cases suggests, both aspects are important. At the same time, the consumer's knowledge in insurance matters

is challenged because they are expected to have information about usual regulations and rules. The cases point to an underestimation of avoidance costs by the courts, which yields too high of a due care standard. Nevertheless, it must be recognized that courts seem to be able to detect lies and deceit, as some verdicts point out. Also, there are verdicts in which the courts distinguish between avoidance costs and expected damages, and therefore "ask the right question" as far as economic considerations are concerned. Hence, the question arises: "Can courts be expected to go through a learning process that eliminates failures in the long run?"

4.4 Conclusion

Inadequate counseling is an important problem around the world; however, the European Union issued a directive in 2001 to strengthen consumer protection by providing a legal claim concerning poor counseling. Additionally, the legislator specified duties concerning information, counseling and documentation requirements. Those duties are supposed to solve the problems that occur from asymmetrically distributed information by vaguely prescribing a due care standard. Such standards are also required in the U.S., as stated in the introduction. The main difference is that the stated duties have to be interpreted by European courts in order to apply the existing liability rule. From an economic perspective the liability rule now forces the intermediary to take all costs that result from his advice into consideration. Without any errors, negligence liability maximizes social welfare, but ongoing discussion about even more regulatory activities in this field might signal a failure of the liability rule.
The analysis of the twelve verdicts regarding potential failures of the liability rule shows that courts tend to understate intermediaries' due care level. The requirements concerning the particular duties are low if one considers the intermediary an expert in insurance matters and keeps the availability of information as well as the costs in mind. The understatement yields a care level that is not socially optimal. Is contributory negligence an issue? Explicitly, no; but the courts state requirements concerning the provision and processing of information. Thus, the consumers have to fulfill a care standard too. Generally, the requirements are such that a consumer can act appropriately. It can be expected that a consumer provide the relevant information and questions phrases that are unclear. However, it cannot be expected that a consumer has expert knowledge and discovers failures, gaps or inconsistencies in their insurance coverage. Therefore, the inappropriate processing of information that some decisions refer to might overstate the due care standard for consumers. The result is that consumers do not fulfill the standards and induce the intermediary to reduce his care level. In this case, neither the consumer nor the intermediary picks a care level that is socially optimal.

The analysis suggests an understatement of intermediaries' duties as well as a potential overstatement of consumers' duties will yield socially suboptimal results. The too often missing documentation reinforces that tendency. Therefore, the effect of the liability

rule could improve if courts carefully considered these aspects. Especially, concentration upon the availability of relevant information and the appropriateness of resulting costs could help eliminate the problem of care levels that are too low. Other regulation activities may become obsolete and won't cause additional redistribution costs. Returning to the question "Can courts be expected to go through a learning process that eliminates failures in the long run?" that was raised in the previous section. Posner and Sunstein (2006) apply the Condorcet Jury Theorem to the question, "Should courts refer to previous judgments in order to make the right decisions" The Condorcet Theorem uses the law of large numbers and holds if single decision makers make independent choices with a probability larger than 50% they are correct. Therefore, the larger the group gets, the better the decisions. Thus, applying the theorem to court decisions, the consultation of other judgments can provide additional information and increase the chance that the ruling is correct. Posner and Sunstein (2006) state three conditions that must be met in order trigger the learning process. First, decision makers have private information and base their choice on those. Second, the situation has to be similar; hence, comparable. Last, the decision that serves as additional reference has to be independent from other judgments (i.e. the decision shall not use information of other judgments itself). However, if the courts are systematically biased or are in a cascade (not independent) their decisions should be ignored (Posner and Sunstein, 2007). Referring to the court decisions in this paper, a learning process is not precluded per se. Verdicts in which the defendant is a broker refer to the "trustee decision"[35] by stating the right to-be standards. On the other hand, verdicts in which other types of intermediaries are involved do not refer to a "common" decision. However, since the liability rule sets the right incentives, once the courts ask the right question a learning process will presumably eliminate the source of failure.

This analysis only represents a starting point. If more cases were available to examine, it would be possible to analyze certain aspects of the failure of the liability rule in greater detail. Additionally, it should become possible to analyze if a learning process evolves.

[35]Federal Court of Justice (of Germany) 5/22/1985 IV ZR 190/83 (Sachwalterurteil)

5 Conclusion

The process of de-regulation in the field of insurances affected both the supply of insurance products and the consumer protection. While the influence upon the supply of products was positive, consumer protection suffered losses. In order to re-strengthen consumer protection, the European Union adopted directive 2002/92/EG which was implemented into German law in 2006 and changed existing legislation concerning insurance companies and insurance intermediaries. Since 2006, counseling activities of insurance agents and brokers are regulated by law. By stating several duties and responsibilities, the regulation aims at a reduction of informational asymmetries between intermediary and consumer in order to prevent welfare losses due to opportunistic behavior.

The objective of this thesis was to work out the connection of legal regulatory activities and the economic theory in order to analyze if the stated liability rule provides a solution to the agency problem. In particular, the answers to the questions "How do intermediaries influence the demand for insurance?", "How can miscounseling be defined by using an economic approach?", and finally "Does the fault-based liability rule sets the right incentives or does it fail?" were discussed.

The first question, "How do intermediaries influence the demand for insurance?" was answered in Chapter 2. The chapter applied basic insurance demand theory in order to point out the interdependency of economic determinants and legal duties. The economic theory points at relevant information which is basically needed to solve the insurance demand decision. But, it also becomes obvious that consumers make mistakes while taking out insurance policies, thus, the basic insurance demand theory fails in predicting choices and actions. Considering those circumstances counseling by experts should improve the situation. Yet, the existing remuneration scheme in Germany rewards the sale of insurance policies instead of counseling efforts. Thus, the intermediaries' incentive to provide good advice is undermined. At this point the legal duties and the liability rule have to be considered, since their design has to be such that agents and brokers are forced to supply necessary information if they can collect it at low costs. Being experts, intermediaries should be able to provide information at lower costs than consumers. Thus, the law states basically four responsibilities for intermediaries to fulfill as well as a liability rule to sanction violations. Those duties can be matched to economic determinants as stated by economic theory to identify ideal counseling behavior. The theoretical examples in Chapter 2 show that the counseling activity varies between different insurance products. The liability rule should ensure a right advice in each case at an individual level. Economic determinants of insurance demand that are within the intermediary's

sphere can be used to specify legal duties. Hence, both aspects complement one another.

Although Chapter 2 took a closer look at the interdependency of both stated law and economic theory, certain aspects still remain unanswered. Especially, questions about products that might represent substitutes from a consumers' point of view, such as term life insurances and an endowment policies, become relevant. Also, the heterogeneity of products has to be included because the decision-making problem now turns towards a selection problem that has to be dealt with. Chapter 3 included those aspects and introduced a consumer theory (Lancaster, 1991) that is able to cope with product heterogeneity. The combination of the consumer theory and the idea of representing heterogeneous products in a spatial model ((Hotelling, 1929) and (Salop, 1979)) yields a framework that enables a comparison of utility levels, precisely utility losses, in situations with and without intermediation. A consumer who takes out an insurance policy without any expert knowledge might make mistakes because of missing information (Tennyson, 2010) and subsequently experiences utility losses. Hanson and Kysar (1999) state that insurance companies might take advantage of those limitations. The question is whether the existing liability rule triggers the provision of relevant information. Insurances are considered to be experience or even credence goods (Wein, 2001, p.69). To transform those goods into search goods (Grundmann, 2002), the accuracy of the given information is relevant. In the case of insurance intermediation the accuracy of the information is supposed to be secured via liability. However, there has to be a way to distinguish between accurate information (what is called "right advic" in Chapter 3) and information that is not accurate. This differentiation is conducted by the model using economic variables and economic assumptions about rational behavior. As a result, an information based definition of miscounseling can be stated by using a utility orientated mismatch approach. A benchmark has to be defined in order to distinguish between situations in which the advice improved consumer's choice and situations in which the advice was misleading. Using an information-based definition of poor counseling, one can distinguish between miscounseling on the one hand and not matching the consumer with the ideal contract on the other hand. Hence, advice that might tend to the right direction but, still, does not lead to an ideal match of product and preferences. So, miscounseling can be defined by using an economic approach that concentrates on changes in utility that result from information provided. Additional information has to be supplied if it is available and easily accessible. As a result, a consumer's utility can be improved at reasonable costs.

The last part dealt with effects of the stated negligence liability rule. Instead of concentrating only on the decision of consumers and the behavior of intermediaries, Chapter 4 introduced an additional player, the court. Even though the liability rule should set the right incentives it might fail under some circumstances and yield another than the socially optimal care level. The chapter analyzed twelve court cases in which poor counseling could have been an issue. The courts have to interpret legal terms and have to decide whether a carried out care level fulfills the requirements. Since negligence liability needs a benchmark, systematically wrong estimations of due care result in an

adaptation of behavior of both the intermediary and the consumer. Hence, the liability rule that generally sets the right incentives fails. The analysis of the verdicts provides some evidence that courts tend to understate the care level of intermediaries' on the one hand. On the other hand, the literacy of consumers' in insurance matters is challenged. Thus, the cases point at an underestimation of consumer's avoidance costs. All in all, the to-be standard of intermediaries' is too low, whereas the requested care level of the consumers' is too high, yielding sub-optimal care levels on both sides. Nevertheless, the courts seem able to undergo a learning process as the number of verdicts increases.

Having analyzed different aspects of the defined liability rule one could go a step further and ask, whether the goal to strengthen consumers' protection and, thus, to solve the agency problem has been achieved. In order to solve the agency problem, the intermediaries have to become "perfect agents" of the consumer. Therefore, the liability rule has to cope with two different aspects. On the one hand, the agent has to accept the contract and must be willing to work for the principal. On the other hand, the incentives have to be such that the principal's preferred alternative maximizes the agent's utility. Only if both requirements, participation and incentive compatibility, are met is it possible to prompt the agent to act upon the principal's interest. But, as the principal cannot monitor the agent's effort properly, the agent has an incentive to execute low effort because it is less costly. Usually, problems resulting from hidden action are solved via an adequate remuneration scheme. Thus, the question arises if the necessary requirements of participation and incentive compatibility are sufficiently complied with by the commissioning system in the insurance market. The answer has to be no. Why? Whereas the participation requirement is fulfilled by the payments, the incentive compatibility condition is not because the consumer is not able to formulate the necessary remuneration scheme. As this alternative to solve the agency problem is not existent, the liability rule might step in and serve as a solution. Considering that it has to be the case that the lower costs resulting from less effort are compensated by expected damages which are ideally internalized under negligence liability. Generally, a liability rule enables an influence upon individual behavior by altering the costs and benefits that are relevant in the decision-making process. The design of negligence liability rules requires much information about relevant determinants in order to state duties and responsibilities. The German Insurance Contract Act states basically four responsibilities using vague legal terms which have to be interpreted by the courts. By applying economic theory those responsibilities can further be specified. In order for the courts to be able to "ask the right questions" whenever they have to judge on potential miscounseling cases, the specifications become relevant. Being experts, intermediaries have to provide information that enable improved consumption decisions. Hence, based upon the responsibilities and their specifications, the individuals have to reflect on how the given information contributes to the decision-making process. Only precisely stated to-be standards provide a guideline for individuals' actions in the long run. Therefore, the aim to strengthen consumers' protection can be reached if it becomes more obvious

what can be expected of the single market participants. Thus, at the moment, the courts take a key position in setting the direction of the development at the market of insurance intermediary services. Economic theory helps to better understand the relevant determinants of insurance demand and, therefore, provides guidance.

Considering those results it seems to be quite fruitful and interesting to analyze this topic in an interdisciplinary manner. At the moment, the ability of the courts to include economic considerations into adjudication represents one of the bottlenecks. For future research it is therefore necessary to focus on the development of law and upon a possible learning process of courts. Based on the analysis of past and potential future verdicts it seems promising to implement an economically based adjudication that sets the right incentives and, thus, provides guidelines for market participants. Additionally, it is interesting to analyze the development of the market for intermediary services. Since the implementation of the EU standards, the exact numbers of intermediaries by type are known and published by the Association of German Chambers of Commerce and Industry[1]. A first glance at the data reveals that the total number of intermediary decreased since 2008. First calculations of the single shares of types of intermediaries, such as tied agents, brokers, consultants etc., show that the shares of tied and multiple agents decreased constantly whereas the shares of brokers and consultants increased. So, the question arises if the market structure in going to change significantly in the future. Also, the manner of implementation of the EU Directive and the resulting changes in behavior as well as the market development in the other European countries might yield further insights as far as the insurance market as well as the market for intermediary services are concerned.

[1] www.dihk.de.

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