Fairness crowded out by law:
An experimental study on withdrawal rights[*]

by

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Withdrawal rights protect buyers in distance selling, for example when ordering via the internet. After introducing such a law in Germany the proportion of returned goods drastically increased although most sellers had already offered a return option before. We experimentally investigate scenarios in which sellers can voluntarily offer a withdrawal right. In a second treatment it is provided by law. We find indications that a voluntary provision is perceived as friendly on which buyers reciprocate by not exploiting sellers too heavily. A third treatment reveals that small return costs for buyers have only a marginal influence on withdrawal behaviour. (JEL: K 12, C 91)

1 Introduction

The importance of fairness considerations in exchange relationships has gained considerable attention in economics over the last decades (GÜTH, SCHMITTBERGER, SCHWARZE [1982], KAHNEMAN, KNETSCH, THALER [1986], GÜTH [1995], FEHR, SCHMIDT [2002], KONOW [2003]). The idea of fairness demands to take the consequences on others, for example business partners, into account when deciding on own actions. Fairness has been identified as an important motivating factor for human behaviour. Fairness constitutes also an important aim in law. In general law seeks to induce individuals to refrain from undesired behaviour and to pursue desired behaviour which includes fairness. It is therefore not surprising that the law contains many rules which aim at promoting fairness in business transactions. The main example is the *principle of utmost good faith*. In a business context this principle is understood as the obligation of each business partner to consider the legitimate interests of the other party (SOERGEL [1967], § 242 BGB Rdnr. 1). In German law, like in many others states, the principle of fairness is emphasised by statutory regulation and is recognised as a

rule of law in most jurisdictions in the world. Like the principle *pacta sunt servanda*, it is part of the general principles of the law of peoples which constitute a transnational body of law (International Court of Justice, Nuclear Tests cases, ICJ Reports, 1974, pp. 253, 168; see also SHAW [2004, 97]).

The relation of fairness and the law

The relation of fairness and the law is rather complex. On the one hand the law seeks to promote fairness. On the other hand the law grants enforceable claims to individuals. With the existence of a statutory ground the entitled subject is granted the possibility to rely on the legal justification of his or her behaviour rather than on voluntarily adopted fairness considerations. Therefore, the principle of utmost good faith operates as a limitation of exercising statutory claims. Fairness also appears to be an important issue for the use of claims arising from consumer legislation. Since consumer statutes grant far-reaching individual rights to protect consumers, for example in buyer/seller relationships, there always emerges the potential for misuse of such rights. This problem has theoretically been raised in the recent literature (REKAITI, VAN DEN BERGH [2000, 382]; HAUPT [2003, 1149]. Whether the provision of rights to protect one of the parties in a business relationship is prone to reduce fairness considerations is at its very heart an empirical question. To approach this issue we report the design and the results of a controlled experiment. As an example of statutory consumer protection our study models and investigates a withdrawal right in distance contracts.

2 Legal Environment and Empirical Insights

Distance selling and the right of withdrawal

Beside the undisputed advantages of distance selling buyers face one important drawback: the purchase is made "in the dark" with regard to both the goods and to the seller (DICKIE, p. 217). The buyer cannot easily verify the seller's identity and reliability and, above all, he has no possibility to check or even inspect the available products. For the latter difficulty, a right of withdrawal seems to be the appropriate remedy. It allows the buyer to inspect and to check the ordered goods after delivery and to return them to the seller if her expectations are not met. To encourage the use of distance purchase many sellers granted a right of withdrawal to their customers long before statutory regulation. The withdrawal right was limited to a certain period after delivery, very often two weeks. Usually, in the case of withdrawal the buyer had to return the goods to the seller at his own risk and cost.

The Directive on Distance Contracts

The legal environment of withdrawal rights within the European Community is based on the Directive on Distance Contracts (Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the Protection of Consumers in Respect of Distance Contracts, OJ 1997 L 144/1). The Directive gives consumers the right to withdraw from the distance contract within seven working days without reason or penalty (Art. 6). When the right to withdraw is exercised within the time limit, the only charge that can be imposed on the consumer is the cost of return post for the goods. The Directive aimed at a harmonization of minimum standards leaving to the Member States the possibility to exceed the standards of protection contained within the Directive (Art. 14).

The Transposition of the Directive into German Law

In Germany, the statutory withdrawal right raised much discussion. It was indeed argued by distance sellers that customers might misuse the right to the detriment of distance selling. In particular publishers and internet bookstores feared that sellers could be used as a "library". It was also argued that a statutory right of withdrawal would deprive sellers of gaining a competitive advantage by voluntarily granting a withdrawal right. The German legislator implemented the Directive in 2001 by enactment of the Distance Selling Act (Fernabsatzgesetz, Bundesgesetzblatt (Federal Gazett, BGBl.) 2000 I 897). Later, the Distance Selling Act was incorporated into the BGB. Thus, the BGB now provides for a withdrawal right for consumers who are engaged in distance contracts.

A distance contract, as defined in § 312b (1) BGB, is a contract for the delivery of goods or the supply of service which is concluded between a professional seller and a consumer exclusively by means of distance communication where the supplier uses a distance sales scheme. In sum, distance selling is characterised as the conclusion of a contract for the supply of goods or services at a distance.

In the case of a distance contract, § 312d (1) BGB gives consumers the *right to withdraw* from the contract. The right of withdrawal which is governed by § 355 BGB can be exercised in writing or by returning the good to the supplier within a time limit of two weeks. In the case of a withdrawal the consumer is no longer obliged to pay the price for the goods (§ 357 (1) BGB). Instead he is obliged to return the good to the supplier. If the buyer has used the good the seller is entitled to charge a usage fee, § 357 (3) BGB. In practice however sellers rarely enforce this claim since the use of the good may be difficult to prove. Cost and risk of

return is borne by the supplier. However, the normal cost of return may be imposed by contract on the consumer when the value of the order (since 2005: value of the returned good; see below) does not exceed 40 Euro (§ 357 (2) BGB). This exception for low-value orders should protect, above all, bookshops from being misused as libraries.

The right of withdrawal may be replaced by an unrestricted *right of return*, (§ 356 (1) BGB) which is very similar to the right of withdrawal. There are two main distinctions: The right of return can only be exercised by return of the good to the supplier. This condition favours the supplier as the consumer cannot – unlike in the case of the right of withdrawal – become free of the duty to pay the price and still be in the possession of the good. On the other hand, the cost of return cannot be imposed on the consumer whatever the value of the order is.

Most German mail-order traders chose the option to replace the right of withdrawal by a right of return. In 2001 this led to the introduction of a statutory right to withdraw from a distance contract without costs by the German legislator.

Comparison with other Countries

The implementing legislation of the Distance Contract Directive differed between the Member States. It appears that the German solution is friendlier to consumers than most other legislations. Many Member States chose shorter time limits for the withdrawal right. In France, the period is 7 days; in some countries (e.g. United Kingdom, Austria, and the Netherlands) the period is 7 working days, 10 days (Greece) or 10 working days (Italy). Denmark, Finland, Portugal and Sweden also granted a period of 14 days. Most other states followed the Directive in allowing that the cost of return may be imposed on the consumer. Only Finland chose the "German" model obliging the supplier to bear the cost of return.

Recent Modification of the Right to Withdraw

In practice the right of return is heavily used. The Federal Association of German Mail Order Traders (*bvh*, Bundesverband des Deutschen Versandhandels e.V.) reports a continuous increase in the use of the right of return which reached an alarming ratio of returned deliveries of 35 % (35 returns per 100 deliveries) in 2004 (see below). The experience reveals that a large portion of returns (40%) is caused by a relatively small number of customers (10%), often – unofficially mentioned to be – persons with low income.

In 2004 the German legislator reacted to this development by changing the conditions of the right to withdraw: Under the new regulations the cost of return may be imposed on the

consumer when the value of the returned item (before: value of the order) does not exceed €40. When the value of the returned item exceeds €40, the cost of return may be imposed if the consumer has not yet paid the price. With the latter change the return without cost does no longer exist at least the consumer has to bear the cost of financing the price for a short period. This appears to be attractive to traders, since some major traders, like the mail order house *Otto*, do not grant a right to return any longer in their current conditions of trade.

Empirical Insights

In its announcement on the use of the withdrawal right in distance selling the *bvh* reports empirical data which have been gathered by questionnaires from a number of companies representing more than 50 % of the market share in German distance selling. Covering a period from 1998 to 2004 the data show a continuous increase in the exertion of the right to withdraw: the return quota, measured in returns per sending, increased constantly from 24.2% in 1998 to 35.0% in 2004. Measured in terms of the values of returned products per delivered products there was an increase from 24.6% in 1998 to 33.1% in 2004. This development encompasses all kind of goods; not surprisingly the highest return quota is observed in the area of women's cloths, reaching a return quota (value) of 53.1% in 2004 (ROLAND BERGER [2005]).

In the area of clothing the right of return seems to be used as a means to find a piece that fits. Traders report that in many cases a single order comprises identical items with the only difference in the size. In many cases consumers ordered a considerable number of items which almost all are returned afterwards. Here, the decision process appears to have started only after the receipt of the goods. Interviews with consumers and quotations from the internet support this view (ROLAND BERGER [2005]). Additionally unofficial statements increasingly report cases in which a distance contract with a right to return is used to "borrow" goods. Examples include orders of expensive TV-sets before a soccer championship, which are returned after the tournament, or the order and return of a wedding dress.

The *bvh* suspects two factors of being the main reasons for this development: A growing inclination of consumers to use the withdrawal right for orders which imply the return of goods and the decision to exclusively charge the seller with the return costs excluding any incentive for the consumer to avoid return costs. The data reported by the *bvh* do not explain the reasons of the growing inclination to withdraw. Unfortunately, the data start with the year 1998, so one year after the enactment of the distance selling directive which already may have had an influence on the behaviour of both sellers and consumers even before its

implementation into national law. It is interesting that in distance selling outside consumer contracts the right of withdrawal – which is voluntarily granted without statutory regulation by most sellers – seems not to be used in a comparative frequency.

As a result, the historical development and the data reported by the *bvh* suggest at least two possible grounds for the increasing exertion of the withdrawal right:

(*i*) The shift from a voluntarily granted right of withdrawal to a statutory justification of the withdrawal, and

(*ii*) the exclusive liability of the sellers for the return costs.

In the current study we experimentally investigate these potential reasons for the considerable increase in returns.

3 Experimental Design and Procedure

The experimental design reflects our endeavour to map distance sale situations into a simplified framework. Subjects are given the role of a buyer or of a seller. The buyer has the possibility to order goods and – if a right of withdrawal exists – to return them to the seller. The payoffs of the participants depend on whether and to what extent the buyers make use of the possibility to order and to return goods.

3.1 The Scenarios

We modelled three types of scenarios which reflect different critical situations in distance selling. The parameters used in these scenarios are summarised in table 1.

Table 1: *Parameters used in different scenarios*

v_b	buyer's value of a bought item if it is desirable, otherwise the value is 0
v_u	buyer's value of a used and returned item
c_o	buyer's cost of one order (independent of the number of items)
p	price paid by the buyer to the seller for one bought item
c_{rB}	buyer's cost of returning one item
c_p	seller's cost of providing (producing) one item when it is bought
c_{rS}	seller's cost of returning one item
q	probability that G1 is the valuable item in a type 2 scenario; $(1 - q)$ is the probability that G2 is the valuable item; $q \geq 0.5$
q_1	probability that G1 is a valuable item in a type 3 scenario; $q_1 \geq q_2$
q_2	probability that G2 is a valuable item in a type 3 scenario; $q_1 \geq q_2$

Scenarios of Type 1

In the scenarios of type 1 the items that can be ordered have a certain value for the buyer through temporary use only. Therefore, in these scenarios the buyer obtains a payoff v_u if he orders an item and returns it after usage. This situation resembles, for example, the "borrowing" of a TV screen.

If a right of withdrawal exists in this type of scenarios the buyer has the following two choices: He can (*i*) not order or (*ii*) he can order, use and return the good. In the case of no order both players earn nothing. In the second case the buyer suffers the cost from ordering c_o as well as his cost of returning c_{rB}. This results in a payoff of

$$u_B^{Sc1\_order} = v_u - c_o - c_{rB}. \tag{1}$$

The seller has to bear his costs of return c_{rS} and this determines his payoff of

$$u_S^{Sc1\_order} = -c_{rS}. \tag{2}$$

The seller's costs of return reflect his effort to check for the quality of the returned item and to put it back to storage. Additionally, it includes his losses if he has been returned a less valuable item, for example, due to minor usage.

Scenarios of Type 2

In the scenarios of type 2 an item is offered in two versions G1 and G2 from which one of them has a value of v_b and the other has a value of 0 if the buyer buys it. There is no benefit from short-time usage only. It is, however, uncertain whether G1 or G2 is the valuable item. Whether an item is valuable becomes clear only after delivery. A real word parallel is, for example, the order of a piece of cloths which is produced in different sizes.

Again, for each order the buyer incurs a cost of order of c_o. If a right of withdrawal exists, the buyer has the following choices: He can choose between (*i*) no order, or (*ii*) *sequential* order, i.e., he first orders G1 which will be the valuable item with a probability $q \geq 0.5$. If it turns out that G1 has the value 0 he returns G1 and in a second try he will order G2. Or the buyer can (*iii*) order both variants G1 and G2 *simultaneously* and he returns the item which happens to be the one with less value, i.e., the one with the value of 0. If the buyer does not order the buyer and the seller earn nothing. If the buyer chooses the sequential order his expected payoff is given by

$$Eu_B^{Sc2\_seq} = v_b - p - c_o - (1 - q)(c_o + c_{rB}). \tag{3}$$

In this case the seller's expected payoff amounts to

$$\mathrm{E}u_S^{Sc2\_seq} = p - c_p - (1 - q)\, c_{rS}. \tag{4}$$

In case of a simultaneous order the buyer's payoff is

$$u_B^{Sc2\_sim} = v_b - p - c_o - c_{rB} \tag{5}$$

and the seller receives the price p and has to bear the cost c_p for providing a bought item as well as his costs c_{rS} of a returned item. Thus, his payoff sums up to

$$u_S^{Sc2\_sim} = p - c_p - c_{rS}. \tag{6}$$

It becomes clear that the sequential order is more beneficial for the seller than the simultaneous order since he has to bear his return costs only if G1 is not the valuable item. However, if the buyer's return costs c_{rB} are not too high the buyer prefers a simultaneous order to a sequential order since by ordering simultaneously he incurs his cost of order c_o only once.

Scenarios of Type 3

In the scenarios of type 3 the items are also offered in two versions G1 and G2 and each can either have the value v_b or the value 0 for the buyer if it is bought. G1 has the value v_b with probability q_1 and with probability $(1 - q_1)$ it has the value 0. Analogously, G2 has the value v_b with probability q_2 (independent from q_1) and with probability $(1 - q_2)$ it has the value 0. It is assumed, however, that the buyer can only needs a single item with a positive value. Thus, he cannot gain from two items having the value v_b in which case he receives the value v_b only once. A real word parallel is, for example, the order of two different pieces of cloths where the buyer is unsure whether he really intends to buy one of them.

In the scenarios of type 3 the buyer has the same choices as in the scenarios of type 2: (*i*) no order, (*ii*) sequential order, and (*iii*) simultaneous order. Again there are no earnings for seller and buyer without an order. If a withdrawal right exists the buyer's expected payoff from sequential order is

$$\mathrm{E}u_B^{Sc3\_seq} = q_1\,(v_b - p) - c_o + (1 - q_1)\,[\,-c_{rB} - c_o + q_2\,(v_b - p) + (1 - q_2)\,(-c_{rB})\,] \tag{7}$$

while his expected payoff from simultaneous order amounts to

$$\mathrm{E}u_B^{Sc3\_sim} = q_1\,(v_b - p - c_{rB}) - c_o + (1 - q_1)\,[-c_{rB} + q_2\,(v_b - p) + (1 - q_2)\,(-c_{rB})\,]. \tag{8}$$

The seller, again receives the price p and has to bear the cost c_p for providing a bought item. If an item is returned his return costs are c_{rS}. Thus, the seller's expected payoff in case of a sequential order is given by

$$\mathrm{E}u_S^{Sc3\_seq} = q_1\,(p - c_p) + (1 - q_1)\,[-c_{rS} + q_2\,(p - c_p) + (1 - q_2)\,(-c_{rS})] \qquad (9)$$

while it the buyer obtains

$$\mathrm{E}u_S^{Sc3\_sim} = q_1\,(p - c_p - c_{rS}) + (1 - q_1)\,[-c_{rS} + q_2\,(p - c_p) + (1 - q_2)\,(-c_{rS})] \qquad (10)$$

if he orders simultaneously. Again, the sequential order is in expectation more beneficial for the seller than the simultaneous order. On the other hand, if the cost of return for the buyer c_{rB} is not too high the buyer obtains a higher expected payoff with a simultaneous order than with a sequential order.

If no right of withdrawal exists the buyer has to pay the cost of ordering, c_o, and the price, p, if he orders an item while he yields the value v_b if the item turns out to be desirable. The seller receives the price, p, and has to pay the cost, c_p, of providing the item. In the type 1 scenarios the buyer can choose to order or not to order. In the scenarios of type 2 and 3 the buyer has the choice between no order, sequential order, and simultaneous order.

3.2 Experimental Treatments

Our experiment is designed to investigate into two aspects which are assumed to influence the consumers' decision on exercising the right of withdrawal: (*i*) the legal base of a right of withdrawal and (*ii*) the cost of return. Therefore, we consider three treatments which are described below.

Voluntary Offer of a Withdrawal Right (Treatment vol)

In the first treatment there is no statutory right of withdrawal. Instead the sellers decide at the beginning of the experiment whether they grant a right to withdraw or not. When taking this decision the sellers do not know the details of the scenarios' parameters. This decision is the only one taken by the sellers and they are bound to them over the whole experiment. If sellers' decisions differ the buyers subsequently have the choice whether they want to purchase from a seller who grants a withdrawal right or not. Buyers are matched with equal numbers to a seller who offered their preferred choice. The matching remains fixed for all interactions, i.e., a buyer purchases always from the same seller and the seller deals always with the same set of buyers. The voluntary offer of withdrawal right in this treatment reflects the situation that existed before 1997 and still exists for contracts between businesses.

Withdrawal Right by Law (Treatment law)

The second treatment is characterised by the existence of a statutory right of withdrawal. Here the sellers do not have to take any decision. Instead their payoffs depend only on the decisions of the buyers. There are no further distinctions between the treatment vol and the treatment law. In particular the scenarios in the law treatment are identical to the scenarios in the vol treatment with a right of withdrawal.

Withdrawal Right by Law with Cost of Return for the Buyer (Treatment law_rc)

The third treatment is identical to treatment law with the exception that the buyer has to bear a cost of return c_{rB} of 0.5 if he returns an item. The introduction of return costs for the buyer has different consequences on his expected payoff in different scenarios. In scenarios of type 1 the buyer's value of using the item are lower by 0.5, i.e., in these scenarios the net profit from ordering an item is the same as in the type 1 scenarios of the other two treatments, i.e., the buyer's return costs merely constitute a different label. In the scenarios of type 2 and type 3 the price p and the seller's return costs c_{rS} are lowered each exactly by 0.5, resembling a partial shift of the return costs from the seller to the buyer combined with a simultaneous price reduction. The net effect of these changes (compared to the other two treatments) differs between scenarios: In some scenarios the introduction of the buyer's return costs makes the sequential order more beneficial for the buyer than the simultaneous order, i.e. his expected payoffs are higher in the former than in the latter. In other scenarios the simultaneous order still pays more for the buyer than the sequential order (as it is always the case in the other two treatments). From the perspective of the seller sequential order is always preferable to the simultaneous order.

3.3 Experimental Procedure

The experiment was conducted in the Laboratorium für experimentelle Wirtschaftsforschung at the University of Cologne. Subjects were recruited with the online recruiting system ORSEE (GREINER [2004]). Most of the 179 subjects were students from various disciplines, mainly business administration and economics. The experiment was implemented with the experimental software z-tree (FISCHBACHER [1999]). 6 Sessions were conducted – 2 sessions for each treatment with 30 subjects per session. In one session only 29 subjects participated as one subject did not show up. Participants were allowed to take part only in one session. In all three treatments a partner matching was employed. In the treatment vol sellers were asked in the beginning whether they preferred to offer a withdrawal right or not. Subsequently

buyers could choose whether to order from a seller offering a withdrawal right or from one who did not. Only 2 buyers chose to order from a buyer who did not offer a withdrawal right. In total this left us with 48 buyers in treatment vol, 50 buyers in treatment law, and 49 buyers (due to the one no-show-up) who ordered under the condition of a withdrawal right. The decisions of one buyer were treated as one single observation in the statistical analysis.

Each session began with an introductory talk and the written instructions were handed out to the subjects (Translations are provided in the appendix; the original text in German is available on request) and read aloud by the experimenters. Subjects were informed that in the type 1 scenarios the option order maximises the buyer's profit while it harmed the seller. Additionally, the instructions indicated that in the scenarios of type 2 and type 3 simultaneous order was always preferable to sequential order for the buyer while the opposite was true for the seller. To minimise presentation effects the experiment was not connected to any legal discussion. The question whether the use of the right to withdraw could be seen as "misuse", was strictly avoided. After the introductory talk the subjects were seated in randomly attributed cubicles, visually separated from one another by curtains. In each session 25 subjects were randomly (by the computer software) assigned the role of a buyer and 5 subjects were assigned the role of a seller. An endowment of 100 Talers (the fictitious experimental currency) was provided to each of the buyers. A seller received an endowment of 100 Talers for each buyer who was matched to him. Each participant was only aware of the exact amount of his own endowment.

A session consisted of 25 rounds. In each round a different scenario was presented to each of the buyers. There were 8 different scenarios of type 1, 9 different scenarios of type 2, and 8 different scenarios of type 3. The exact parameters which were employed for the 25 scenarios cover various situations with different payoff and efficiency characteristics. They are provided in the appendix. Each buyer had to decide on the same 25 scenarios which were presented in a random order to each individual buyer. After a decision was taken by the buyer in each round the payoff results were displayed to him. However, he was not informed about the choices of the other buyers. The seller was informed about all the transactions performed by all the buyers matched with him.

One session lasted for approximately 1½ hours. Immediately after the session, the participants were paid anonymously in cash. The exchange rate was set to €0.06 per Taler. Additionally, each participant received a show-up fee of €2.50. Total earnings ranged from €2.50 to €78.10 with an average of €13.86.

We expect the order choices of the buyers to be guided by different behavioural patterns which vary between individuals. Most likely individual maximisation of expected payoff is a dominant motive. We also know from numerous experiments that many subjects show fairness considerations and exhibit other-regarding preferences in contractual relationships (CAMERER [2003] for an overview). Given the substantial amount of evidence regarding the reinforcement of fairness considerations by intentions and reciprocal behaviour in buyer seller relationships (BERG, DICKHAUT AND MCCABE [1995], FEHR, KIRCHSTEIGER AND RIEDL [1997], FEHR AND GÄCHTER [2000], ABBINK, IRLENBUSCH AND RENNER [2000], MCCABE, RIGDON AND SMITH [2003], FEHR AND ROCKENBACH [2003], IRLENBUSCH [2004], FALK AND KOSFELD [2006]) one should expect that there is a considerable difference in withdrawal behaviour depending on whether they are voluntarily granted by sellers or whether they are imposed by law. If the seller voluntarily offers a withdrawal right to the buyers this might be perceived by them as a generous act and they might feel inclined to reciprocate by not exploiting the seller too much. On the other hand a withdrawal right imposed by law would provide the buyers with an entitlement to exert this right (compare HOFFMAN AND SPITZER [1982], [1985], FAHR AND IRLENBUSCH [2000]). Additionally, it would deprive the seller of showing "friendly" intentions and thereby buyers might not see the need to be considerate of the seller. This leads us to our first main hypothesis:

Hypothesis 1 (*Fairness crowded out by law*). If the seller grants a withdrawal right voluntarily (treatment vol) buyers tend to make order decisions that are less harmful for the seller than if the withdrawal right is imposed by law (treatment law).

For the type 1 scenarios this means that buyers are more reluctant to use the order possibility in vol than in law. In the scenarios of type 2 and 3 sequential order is always more beneficial to the seller than simultaneous order. The buyers expected profit, however, is in general higher with a simultaneous order.

It is often suggested that the existence of return costs for the buyer can deter buyers from exploiting a right of withdrawal too excessively. To investigate this conjecture we designed a third treatment which comprises a withdrawal right by law while additionally the buyer has to bear return costs (law_rc). Since we assume that the existence of a withdrawal right by law makes the buyers less fairness oriented we conjecture that the buyers in treatment law_rc will employ more sequential orders than in treatment law only in those scenarios in which it pays for them.

Hypothesis 2 (*Influence of buyer's return costs*). If a withdrawal right exists by law and the buyers have to bear (a share of the) return costs (treatment law_cr) they will avoid returning more items than without return costs (treatment law) only if this behaviour increases their expected payoff.

In a scenario of type 1 this would mean that one should observe no difference in buyer's behaviour. The same is true for those scenarios of type 2 and type 3 in which the expected buyer's payoff is higher if he orders simultaneously although the return costs exist. However, in scenarios in which the introduction of return costs causes the expected buyer's payoff to be larger with a sequential order than a simultaneous order we expect more sequential choices in treatment law_rc than in law.

5 Results

General Observations Across All Treatments

Table 2 shows the number of choices separately for treatments and scenario types in which a withdrawal right exists. A more detailed overview of the exact numbers of choices in each single scenario is provided table A3 in the appendix.

Table 2: *Overview of number of choices*

treatment	*vol*			*law*			*law_rc*		
scenario type	1	2	3	1	2	3	1	2	3
no order	51	15	80	33	10	95	27	8	94
order / simultaneous order	333	256	243	367	309	266	365	223	217
sequential order	-	161	61	-	131	39	-	210	81

The large numbers of order choices in scenarios of type 1 and simultaneous orders in type 2 and type 3 scenarios indicate already that the maximisation of the own individual payoff seems to be the predominant motivational force of the buyers. This impression is also reinforced by the observation that the number of sequential orders is substantially higher in the law_rc than in the other two treatments (recall that the return costs make the sequential order more profitable in some scenarios than the simultaneous order). There are only two type 2 or type 3 scenarios in which both order forms result in negative buyers' payoffs namely scenarios 20 and 24. Exactly in these two scenarios the number of no order decisions is much higher than in the other scenarios which again is evidence for payoff maximising behaviour. In fact in treatment vol 70% of the order choices maximise the (expected) payoff

of the buyers. In the other two treatments the numbers are even higher with 76% in treatment law and 74% in treatment law_rc.

A more detailed analysis of the individual behaviour (see table A4 in the appendix for an overview of the behaviour of each subject) reveals that in the treatments vol and law there are several buyers who exclusively concentrate on the maximisation of their own payoff in all scenarios without being considerate of the seller's payoff. These "hardliners" are the subjects 10, 11, 14, 17, 22, 37, 42 in treatment vol and the subjects 6, 14, 17, 32, 36, and 38 in treatment law.

The majority of subjects, however, do not behave like these "hardliners". This becomes already clear from table 2 and might be partly due to decision errors. But if one analyses the behaviour in the different individual scenarios there are also clear indications that fairness considerations towards the sellers play a decisive role. In scenario 4, for example, the number of no order decision is substantially higher than in the other scenarios of type 1. This is true for all three treatments. In this scenario the efficiency of an order defined as the sum of buyer's and seller's payoffs is the lowest among all type 1 scenarios while the order decision provides the buyer with the smallest payoff. Additionally, the loss from which the seller would be saved by not ordering is highest per forgone payoff unit of the buyer. The situation is similar in the type 2 scenario 14 in which quite high numbers of sequential orders are observed in all three treatments although the expected payoff for the buyer is (slightly) higher with a simultaneous order (at least in treatments vol and law). Again the buyers who choose the sequential order sacrifice small amounts of money which save the sellers from relatively large losses. Analogous observations can be made for scenarios 10, 16, 17, 18, 19, and 21. These examples show that buyers are not exclusively concerned about their own payoffs but tend to refrain from exploiting the sellers if this is not too costly for them.

These observations for individual scenarios can also be confirmed on a more general basis. Table A2 in the appendix shows Spearman correlation coefficients between the number of choices in different scenarios of one type and different payoff measures for the same scenarios. For example, the 3rd and the 6th columns show the increase of buyer's or the decrease in seller's payoff when switching from a "friendly" choice for the seller, i.e., no order in type 1 scenarios and sequential in type 2 and type 3 scenarios, to an "unfriendly" choice for the seller, i.e., order in type 1 and simultaneous order in type 2 and type 3 scenarios. It also shows the efficiency gains when switching from a "friendly" choice to an "unfriendly" choice (8th column), or the saved payoff loss for the seller per payoff unit sacrificed by the buyer when switching from an "unfriendly" choice to a "friendly" choice

(9th column). From table A2 it becomes clear that buyers do not exclusively maximise their expected payoffs but systematically take other factors into account, for example, in the treatments vol and law the number of order choices in the type 1 scenarios is highly positively correlated with the efficiency gains from these order choices. Other examples are that among the scenario types 2 and among the scenario types 3 in the treatments vol and law the numbers of the "friendly" sequential orders are positively correlated with the seller's payoff gains per payoff unit sacrificed by the buyer via a sequential order choice.

Fairness Crowded Out by Law: Comparison between Treatments vol and law

In addition to indications that fairness considerations are present in all three treatments we also observe differences in the buyers' attitudes towards the sellers depending on whether the withdrawal right is voluntarily provided or granted by law. Already from table 2 it becomes clear that aggregated over all three scenarios the number of unfavourable choices for the seller (order in scenarios of type 1 and simultaneous order in scenarios of type 2 and type 3) is higher in treatment law (total number = 942) than in treatment vol (total number = 832). In fact this difference is weakly significant ($p = 0.067$, Mann-Whitney U test, one-tailed). This is also confirmed by a Probit regression with robust standard errors controlling for the individual subjects which explains the marginal effect of the treatment t ("0" for vol and "1" for law) on the order decisions ("0" for the "friendly" action, i.e., no order in type 1 scenarios and sequential order in type 2 and type 3 scenarios and "1" for the "unfriendly" action, i.e. order in type 1 scenarios and simultaneous order in type 2 and type 3 scenarios) with dummy variables for the individual scenarios. The marginal effect of the treatment on the decision turns out to be 0.074 (robust standard error 0.041) with a one-tailed significance of $p = 0.033$ (N=2250, Wald chi^2 (25) = 196.96, pseudo R-squared=0.129). Thus, the buyer's decision is 7.4% more likely to be an unfriendly order under treatment law than under treatment vol. This number roughly corresponds to the difference in the proportions of unfriendly actions in the two treatments (75.29% in vol and 82.27% in law). An analogous Probit regression excluding the "hardliners" – who are unlikely to react to a treatment difference (see above) – from the sample becomes even more significant. In such a regression the marginal effect of the treatment on the decision turns out to be 0.096 (robust standard error 0.044) with a one-tailed significance of $p = 0.018$ (N=1940, Wald chi^2 (25) = 205.16, pseudo R-squared=0.146).

If one considers only the scenarios of type 1 the marginal effect of the treatment on the decision turns out to be 0.049 (robust standard error 0.035) with a one-tailed significance of

$p = 0.074$ (N=784, Wald chi^2 (8) = 28.18, pseudo R-squared=0.053). Considering only the scenarios of type 2 we find the marginal effect of the treatment on the decision to be 0.093 (robust standard error 0.066) with a one-tailed significance of $p = 0.079$ (N=857, Wald chi^2 (9) = 65.42, pseudo R-squared=0.069). Regarding the scenarios of type 3 the marginal effect of the treatment on the decision is 0.072 (robust standard error 0.042) with a one-tailed significance of $p = 0.040$ (N=609, Wald chi^2 (8) = 39.62, pseudo R-squared=0.092).

It is also interesting to compare the behaviour in each single scenario (the decisions for each scenario are given in table A3 in the appendix). Among the type 1 scenarios in scenario 5 a no order is significantly more likely in treatment vol than in treatment law ($p = 0.006$, Fisher's Exact test, one-tailed). In the type 2 scenario 11 among the order decisions (sequential or simultaneous order) the sequential orders are significantly more likely in treatment vol than in treatment law ($p = 0.044$, Fisher's Exact test, one-tailed). In the type 2 scenario 13 simultaneous order is significantly more likely in treatment law than in treatment vol ($p = 0.035$, Fisher's Exact test, one-tailed). The same is weakly significantly true for the type 2 scenario 17 ($p = 0.079$, Fisher's Exact test, one-tailed). In the scenario 21, which is a type 3 scenario, among the order decisions (sequential or simultaneous order) the sequential orders are significantly more likely in treatment vol than in treatment law ($p = 0.025$, Fisher's Exact test, one-tailed).

Further evidence from table A2 supports the impression that fairness considerations are more pronounced in treatment vol than in treatment law. While in the treatment vol the numbers of no orders in the scenarios of type 2 are negatively correlated with the buyers' payoffs the same is not true for the treatment law. Similarly in treatment vol the numbers of sequential orders in the scenarios of type 2 are positively correlated with the buyers' payoffs. Again the same cannot be observed in treatment law. Since these correlations are only present in treatment vol but not in treatment law one can conclude that buyers in vol tend to decide about their order decisions in a more flexible way than those in law. For example, buyers in treatment vol are more likely to refrain from an order if their corresponding payoffs are relatively low – and thereby benefit the seller – while the buyers in law more constantly choose their order options – and thereby harm the seller – regardless whether their current profit is high or not. Interestingly, among the scenarios of type 2 in vol there is a positive correlation between the numbers of observed simultaneous orders and the corresponding amounts of the sellers' payoffs. Again the same correlation is not observed in treatment law.

To summarise, we find several – although sometimes only weak – indications that suggest that buyers are more inclined to behave fairly towards the sellers if they have granted the withdrawal right voluntarily than if it is constituted by law.

Influence of Buyer's Return Costs: Comparison between Treatments law and law_rc

In a situation in which a withdrawal right is guaranteed by law we do not find any indications that the introduction of return costs for the buyer distracts them from maximising their individual payoffs. Table 2 shows that aggregated over all three scenarios the number of unfavourable choices for the seller is higher in treatment law (total number = 942) than in treatment law_rc (total number = 805). In fact this difference is significant ($p = 0.001$ Mann-Whitney U test, one-tailed). This difference, however, does not indicate that the buyers in law_rc are more reluctant to return items. In all scenarios of type 1 we do not observe any differences in buyers' behaviour between law and law_rc. As mentioned above in some scenarios of type 2 and type 3 the dominant choice for the buyer becomes the sequential order if return costs for the buyer are introduced. In these scenarios we observe significant increases in the number of sequential orders – the more favourable choice for the seller – in law_rc compared to law (scenario 10: $p = 0.03$, Fisher's Exact test, two-tailed; scenarios 14, 15, 16, 17, 18, 19: all highly significant with $p < 0.01$, Fisher's Exact test, two-tailed). Most likely these increases are mainly due to payoff maximising behaviour of the buyers. For all other scenarios – except from scenario 21 – there are no significant differences in the buyers' choice behaviour between the treatments law and law_rc. In scenario 21, which is a type 3 scenario, among the order decisions (sequential or simultaneous order) the sequential orders appear to be significantly more likely in treatment vol than in treatment law ($p = 0.04$, Fisher's Exact test, two-tailed).

6 Conclusions

This study investigates the influence of a specific statutory foundation – the right to return goods after distance purchase – on buyer's behaviour, in particular with respect to fairness towards the seller.

The experiment is related to the current situation in Germany, where in practice the withdrawal right in distance contracts is heavily used. The setting in the experiment resembles the situation of distance selling and models problematic scenarios which have been observed in real life. In the experiment we avoid framing effects, for example, by presenting the experimental instructions in neutral terms without introducing fairness connotations.

However, the experiment naturally abstracts from several relevant issues. In the experiment the subjects are anonymous in a way that a seller does not know who returns items. In real life the seller knows the purchasing history of his customers and therefore has the chance to fight abuse of the withdrawal right by excluding single customers from ordering. In the experiment we abstract from this option. These abstractions may encourage subjects in the experiment to make use of the withdrawal right and reduce fairness to a larger extent than it would be done in reality. However, the abstractions are unlikely to affect the comparison between a voluntary granted return right and a statutory right of withdrawal.

In the experiment, unlike in real life, the costs of return are completely revealed to the buyer which arguably might favour fairness. One characteristic of our experimental scenarios is constituted by the fact that rational decisions of the buyers require some calculations which are not always easy. Therefore, one should expect some variance in the data. Even more important seems to be the fact that at the moment of a decision a subject does not know what scenarios and scenario parameters will follow. Therefore, to some extent, subjects decide independently from their future decisions and are unlikely to develop a complete strategy for all their orders. Under these circumstances one cannot expect that the decisions of a specific subject are totally consistent.

One important difficulty is the fact that subjects are accustomed to a statutory withdrawal right in distance purchase in real life and they might well be familiar with the heavy use of that entitlement. This real life experience might have suppressed or overlapped the instructions in the treatment introducing a voluntary right of withdrawal and therefore could have disfavoured differences in behaviour between the treatments which indeed are sometimes only weak.

In general, however, the results of the experiment seem to confirm our hypotheses. To a large extent we find that the behaviour of the subjects tends to be rational in the sense that they aim to maximise their own payoff. In fact this aim seems to be the primary motivational force. However, the data show that this is not the only motivational factor which guides behaviour. We find that a majority of subjects do not purely maximise their payoff. Instead most subjects seem to take into account also considerations of fairness towards their business partner. This result is in line with numerous other studies on the influence of intentions and reciprocal behaviour in buyer seller relationships.

Our first hypothesis conjectures that a statutory entitlement might weaken the adoption of fairness considerations in the decision making process. The results of the experiment show

that a shift from a voluntarily granted withdrawal right to a statutory one indeed seems to make a difference for subjects and encourages them to seek their own benefit.

The influence of the statutory entitlement on subject's decisions is confirmed by the results concerning the effect of cost of return to be borne by the buyers. Here the results indicate that such return costs are simply regarded as additional cost and as such introduced in the calculation. Accordingly, the costs of return influence the decisions only in those scenarios in which the fairer choice towards the seller also becomes the option that maximises own individual payoff. Thus, our results do not support a conjecture that the mere existence of return costs – as a pure framing of the purchase situation – distracts subjects from misusing the withdrawal right.

In our view the results strongly suggest further research into whether effects of statutory entitlement on fairness – which have been indicated by the current experiment in the case of withdrawal right in distance contracts – can also be identified in other cases of individual claims granted by statute.

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Due to scarcity of space the appendix is provided online (http://...).

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