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Ethical regulation of economic transactions

Solidarity frame versus gain-maximization frame¹

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In 1963 Macaulay was struck by the fact that business parties hesitated to regulate their transactions formally. He noticed an almost common practice to rely on 'a man's word'. His work sparked much interest in the relational aspects of contracting.

Since then, this topic has been addressed particularly by Williamson (1975, 1985). His transaction cost theory criticizes the neoclassical reliance on legally enforceable contracts. Except in some spot exchanges, people are not fully informed, and opportunistic others will exploit this strategically. This will be especially hazardous when transaction-specific investments have to be made because they retain their value only in the particular relationship. Consequently, the anonymous relation on the market needs to be replaced by an identifiable relationship between the partners. Williamson called this process of transition 'the fundamental transformation' which implies extra investments to mitigate the dependency, for instance by the exchange of hostages or through the establishment of an hierarchical relationship.

The relational perspective on contracting also drew attention to ethical regulation of dependencies. For example, Ouchi (1980) pointed to solidarity norms in clans. According to him, regulation based on solidarity also occurs in situations where individual performance takes place in a team context but is difficult to measure. In such a situation, goals other than material advantage become more important, such as maintaining a good relationship with the other members of the clan. The solidarity norms provide (some) protection against exploitation.

THE INTEGRATION OF SOLIDARITY NORMS AND GAIN-MAXIMIZING BEHAVIOUR

Introducing the relational or solidarity dimension as a separate mechanism of regulation besides market and hierarchy is useful, but also poses a problem, previously addressed by Weber (1961). Weber analysed the transition from an extreme split between the ingroup and outgroup morality to a more general

normative regulation of economic transactions. He concluded that a strong form of solidarity is accompanied by opportunism *between* groups and a norm of equality *within* groups. A comparable conclusion can be drawn from more recent group categorization research based on the social identity theory (e.g. Tajfel and Turner, 1986; Brewer and Kramer, 1986). The sharp distinction between groups leaves relations between them unregulated. On the other hand the accompanying norms of solidarity within the group can be a serious obstacle to individual initiative (and thus contracting). Long-term economic relationships cannot prosper in either case. Rather, such relationships need a general form of normative regulation among all potential contracting partners.

When one introduces the normative dimension into economic transactions, one should thus not only explain when solidarity norms are advantageous (like Ouchi, 1980), but also when solidarity norms are disadvantageous for economic transactions. Such a combined approach has been suggested by Lindenberg (1988). He uses a decision-making model² in his solidarity theory in which gain maximization and solidarity norms appear as different frames that structure the action situation. A situation is structured by a dominant goal that determines selection and ordering of alternatives. How does this work? Given a choice situation, there are various cost and benefit aspects, each related to a potential general situational goal. In this 'competition' of potential goals one will emerge as the strongest: the one that discriminates most between alternative courses of action. This general dominant goal constitutes the frame of the decision maker and alternatives are selected and ordered in accordance with this frame. However, other aspects in the choice situation do not disappear. They affect the salience of the dominant goal and thereby the probability with which each alternative will be chosen.³ For example, when the dominant goal is 'gain', the situation will be screened for opportunities for gain and the alternative courses of action are ordered from highest to lowest expected gain. Yet, when I do business with somebody I know quite well, the wish not to risk losing this relationship may influence the gain-frame by lowering its salience. Thereby the choice probability for alternatives that are not optimal from the point of view of maximizing gain will be increased. When the salience of a frame is low, it does not structure the situation well and it is likely to be replaced by another frame that structures the situation better. In this way, it can happen that **frame switches** occur, i.e. that conflicting goals will weaken each other as frames, a fact that will prove to be quite important for contracting, if the framing theory is right.

On the basis of these arguments, Lindenberg distinguished three relationships based on two frames. Figure 10.1 shows an outline of both frames related to the different forms of solidarity relationship and the underlying principles of the individuals' behaviour. The pure case of a totally non-exploitative relationship is one of **strong solidarity** with norms to help

FRAME	Forms of solidarity	Principle in the individual's behaviour	
		Gain-maximization	Solidarity norms
SOLIDARITY-FRAME	Strong-solidarity	Indirect	Dominant
GAIN-FRAME	Weak solidarity	Dominant	Indirect via 'signalling behaviour'
	Opportunism (no solidarity)	Unlimited	Absent

Figure 10.1 The different forms of solidarity orientation in terms of the principles of gain-maximizing behaviour and normative behaviour

the other in need, not to hurt the other, and to minimize the social distance to the other. In such a relationship, the frame is the goal to conform to the solidarity norms. The model of the totally exploitative relationship (pure opportunism) is unbridled gain maximization with no concern for the relationship and therefore no help, no restraints against hurting the other or increasing the social distance whenever that is instrumental for maximizing gain. Such a situation is thus framed by 'gain' with a very high salience.

There is an important third relationship: **weak solidarity**. It consists of the interplay of two frames: the gain-frame (the salience of which is lowered by the wish to maintain a non-opportunistic relationship) and a relational frame in which the appropriate relational signals are chosen (and the salience of which is lowered by the wish to maximize gain). The gain frame is the prevalent one but whenever claimed gain levels threaten the maintenance of a non-opportunistic relationship, the salience of gain is lowered so much by the relational goal that a frame switch occurs and the situation is structured according to the most appropriate relational signals. For example, you may make profit off an acquaintance but there are profit levels that would clearly hurt the other and thus signal an utter disregard for the relationship. Thus, in weak solidarity, a gain frame is influenced by the goal to maintain a non-opportunistic relationship and, periodically, this goal will even become the frame in which the choice of relational signals dominates the situation. What is the most important relational signal?

The relational frame is not identical to strong solidarity because the goal is only to avoid opportunistic behaviour in the other. Only one of the three solidarity norms will influence the signals: the norm not to hurt the other. This leads to equity as distributional standard. The argument is as follows. In

negotiations, claims are made about the distribution of gain that is produced by the transaction (and thus by both partners together). There are mainly two aspects that influence the share a partner will claim (see Lindenberg, 1988): power-related aspects (such as alternative deals, information asymmetries, etc.) and input-related aspects (such as costs, investments, contribution to the production of the joint good, etc.). Use of power-related aspects in negotiations capitalizes on the ability to hurt the other and will thus give the wrong signals when there is weak solidarity. For this reason, weak solidarity will stress the importance of input-related aspects, i.e. equity considerations, as a legitimate base for claims.

Whereas **strong solidarity** is an effective curb on opportunism, it is bad for contracting because of its relational emphasis on helping and equality. **Weak solidarity**, by contrast, is good for contracting because it leaves gain legitimate (as long as it remains within the bounds of equity) and it discourages opportunistic behaviour. These arguments are summarized in Figure 10.1.

The solidarity theory provides a general framework for explaining the direction (positive and negative) of the effects of norms on economic behaviour. Furthermore the generality of the model consisting of two general principles (or motives) incorporates many otherwise fragmented phenomena concerning norms. This model thus avoids 'the threat of a slippery slope of a lengthy list of non-economic motives' (Kahneman *et al.*, 1987, p. 103).

HYPOTHESES

The core prediction of the solidarity theory is that the relationship between transaction parties tempers gain maximization and it does so *differently* for a weak and a strong-solidarity frame: legitimate (equitable) profit making versus no profit making. The present study will focus on an empirical test of the framing element of the solidarity theory.⁴

In this study, the effects of the two forms of solidarity on the partition of a joint agreement space will be examined. A joint agreement space exists when the buyer offers more than the minimum selling price. Given a fixed maximum offer, the seller determines how this extra value is divided between the seller and the buyer. The solidarity theory can predict how the solidarity frame affects the partitioning of this agreement space. The seller with a strong-solidarity frame will order the alternatives according to the solidarity norms. The partition of the agreement space has the zero-sum aspect that a profit for the seller is a loss (i.e. harm) for the buyer. Thus, the preferred alternative will be the one without profit, where the selling price equals the purchase price. The individual with a weak-solidarity orientation will order the alternatives along the line of profit, but due to the impact of relational signalling, the equitable profit alternative will be highly probable. When the seller is compensated for his costs (mainly the purchase price) an equal split

of the extra value is legitimate when both parties have equal input levels. The opportunistically-oriented individual also orders alternatives by profit, but now the maximum profit alternative will be on top (i.e. the buyer's maximum offer).

In the study the subjects were presented with a scenario of buying and selling a book in which the joint agreement space is 40 guilders (approximately 20 dollars). This amount results from the difference between the maximum selling price of 50 guilders and the purchase price of 10 guilders. The following hypotheses are deduced from the solidarity theory regarding the partition of this joint agreement space.

Solidarity hypothesis

- In the case of an *opportunistic orientation*, the subject will sell the book for a price where his profit is at its maximum: the maximum selling price of 50 guilders.
- In the case of a *weak-solidarity orientation*, the subject will sell the book for a price where partition of the joint negotiation space is equitable. In this scenario, the selling price would be about 30 guilders (the purchase price of $10 + (50 - 10)/2 = 30$).
- A subject with a *strong-solidarity orientation* will not try to make any profit. In other words, he would sell the book at cost (10 guilders).

In order to test the impact of salience, the salience of gain is varied. It is hypothesized that (**salience hypothesis**):

Subjects with a higher salience for gain will ask a higher price from the buyer than subjects with a lower salience.

THE EXPERIMENT, METHOD

Subjects. A total of 155 subjects, female and male students from the universities of Groningen and Maastricht, participated in this study. The subjects were invited in groups of six subjects. Each subject was assigned at random to one of the experimental conditions. The subjects received a compensation for their participation.

Design. The design contained one within-subject factor and two between-subjects factors. The within-subject factor '**solidarity orientation**' had three levels: opportunism, a weak-solidarity orientation and a strong-solidarity orientation. The solidarity orientations were operationalized as forms of personal relations which had to be imagined by the subject. It was expected that when a subject was dealing with a stranger or with an acquaintance, he would have primarily a gain-frame. In the case of the acquaintance, the relational dimension will temper the salience of gain-maximization (weak-solidarity), making for a lower and equitable price. For the subject dealing

with a good friend, solidarity norms were expected to dominate (strong-solidarity). Additional to this within-subject factor, a between-subjects factor 'salience of gain' was introduced in the scenario. The salience of the dimension 'gain-maximization' was varied by assigning roles to the subjects. One role was the professional bookseller, who has to live off his profits (high salience), the other role was the student, who does not depend on making a profit by selling anything (low salience). The factorial design was thus as follows (the operationalizations are mentioned in parentheses):

Design:

Solidarity orientation (within subject)

(between subjects)	Opportunism	Weak	Strong
	(stranger)	(acquaintance)	(good friend)

Salience

Low (student)

High (bookseller)

Besides these factors, a sequence factor was introduced to counterbalance the possible sequence effects. The three levels of the within-subject factor solidarity orientation were presented to each subject in one of the six possible sequences.

Procedure. The experiment was presented to the subjects as a study concerning books. Each subject received a booklet in which a scenario was presented. The scenario described a situation in which the subject was in a position to sell a particular book to someone who was prepared to pay, at most, 50 guilders for it.

(One of the scenarios (the weak-solidarity orientation, low salience) was as follows (the italicizing of the key words is added):

The situation:

Imagine you are a *student* in this city. You advertised in the local university paper in order to sell some secondhand textbooks. *An acquaintance* phoned and told you he was looking for a particular textbook. You did not own that book, but you were willing to look for the book. The *acquaintance* was willing to pay at the most 50 guilders for the book.

Last Saturday you visited a flea-market. You noticed some stands selling textbooks. You remembered the telephone conversation and you started looking for that book. After a short time – about 5 minutes – you found the book. The book cost 10 guilders. You bought the book.

Imagine an *acquaintance* with whom you are experiencing this.

What is the first name of the *acquaintance*. . . .

The last sentence in the scenario (concerning the first name) was not asked in the opportunism condition, because the stranger was supposed to be nameless.

The scenario was followed by a questionnaire which contained questions such as the level of the selling price, the amount the subject wanted to receive for the effort of searching for the desired book, the amount of profit the subject wished to make, the subject's monetarized value of the book, the involvement with the other party. Furthermore, some questions were asked concerning the check on the experimental manipulation, such as the perceived value of profit and of the relationship itself and separately, the relative importance of each of these aspects in considering the selling price.

Following the first scenario, the subject was asked to fill in these questions again for each of the other solidarity orientations. Instead of repeating the whole scenario the subject was instructed to imagine the same situation in which another person had phoned. The three solidarity orientations were presented to the subject in one of the six possible sequences.

At the end of the questionnaire following only the first scenario, seven selling prices were presented one at a time. These selling prices were (for all subjects and in order of appearance): 20, 50, 30, 0, 40, 25 and 10 guilders. The subject was then asked for each proposed selling price about its acceptability, the amount wanted for the effort of searching for the book, and the profit wanted given the person depicted in the scenario.

At the end of the booklet the subjects were asked questions concerning how seriously they had answered the questions and how well they could imagine the different situations.

The questions varied in their response mode. Some questions required an amount of money to be filled in, other questions required an answer on a seven-point scaled bar (unipolar) with labels at the extremes (i.e. totally unimportant to extremely important), or on a nine-point scaled bar (bipolar) with labels at the extremes and in the middle. It is important to note that this last type of scale had a meaningful midpoint. For example, the scale measuring the relative importance of profit versus relationship was labelled as follows: (0) the relationship is much more important than my profit; (4.5) both are equally important; (9) my profit is much more important than the relationship. The midpoint divides the scale into two different frames and is therefore meaningful.

RESULTS

The results were analysed mainly by using the Multivariate Analysis Of Variance-module (MANOVA) in Spsspc 4.0. The significant univariate results

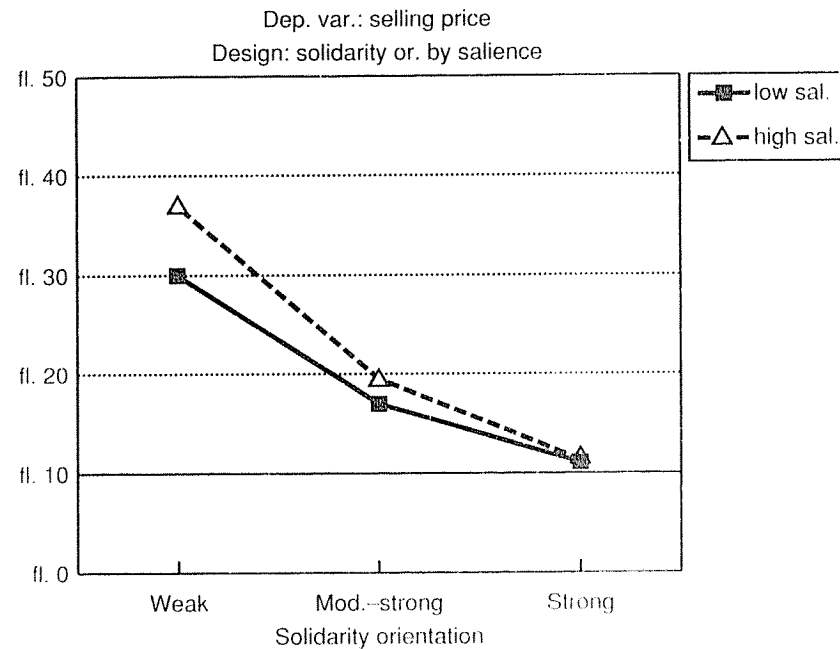


Figure 10.2 The effect of solidarity orientation by the salience of gain on the selling prices asked; the purchase price is fl. 10.-

were only taken into account if there was also a significant multivariate effect. The significance level is 0.05.

Did the experimental manipulation work the way we thought it should? In the Appendix, there is a complete description of the checks on the manipulation. Here it is enough to say that the manipulation worked with one

Table 10.1 The results of the MANOVA; dependent variable is the selling price asked by the subjects, the factors are solidarity orientation (weak, moderately strong, strong) and salience of gain (low, high)

Mult. effect	Mult. F	Sig.	Univ. effect	T-value	Sig.
Constant	1116.2 (1,150)	0.001	Solidarity	33.4	0.001
Salience	7.0 (1,150)	0.009	Solidarity	2.6	0.009
Solidarity orientation	250.2 (2,149)	0.001	Wk-mod. str.	16.3	0.001
			Mod. str-str.	11.0	0.001
Solidarity orientation by salience	6.1 (2,149)	0.003	Wk-mod. str.	2.9	0.005
			Mod. str.-str.	1.4	0.161 n.s.

important exception: it was not possible to achieve a purely opportunistic relation. Subjects related to a stranger had a weak-solidarity orientation, whereas subjects dealing with an acquaintance and those dealing with a friend had a strong-solidarity orientation, although the former had a much lower salience than the latter. As a consequence, the opportunistic orientation was left out of the analysis and the analysis had to be carried out with the actual frame the average subject had in each condition rather than the frames he or she was designed to have. The consequences for the hypotheses will be dealt with when the results are examined. The results of two dependent variables will be examined, that is the selling price the seller (i.e. the subject) charged the buyer and the acceptability of some proposed selling prices for the seller within his or her relationship with the buyer.

The selling price. The means are depicted graphically in Figure 10.2, the results of the MANOVA are summarized in Table 10.1. The results of the MANOVA analysis show that the solidarity orientations had a main effect on the level of the selling price. Subjects charged a higher price to a stranger (the weak-solidarity orientation) than to an acquaintance (the moderately strong-solidarity orientation). The lowest price was asked from the good friend (the strong-solidarity orientation). All univariate differences were significant (wk-mod. str.: $t(df = 151): 16.3, p < 0.001$ and mod. str.-str.: $t(df = 151): 11.0, p < 0.001$). These results are in line with what is predicted by the solidarity theory. The predictions of the absolute selling price are also borne out quite closely: fl. 11.52 in the strong-solidarity condition (predicted fl. 10.00) and fl. 33.47 in the weak-solidarity condition (predicted fl. 30.00).

The MANOVA results also show, as expected, a main effect of salience of gain on the selling price (mult. $F(df = 1,150): 7.0, p < 0.009$). The high salience subject sold his books for a higher price than the low salience subject did. The former subject's (bookseller) mean selling price was fl. 22.95, whereas the latter subjects (students) asked fl. 19.45 on average. Although this difference is small, it is in line with the prediction from the salience hypothesis.

The interaction effect of solidarity orientation by salience of gain shows that the effect of salience (the difference between the high and low salience subjects) is much smaller when subjects had a strong-solidarity frame than when they had a weak-solidarity frame. As can be seen in Figure 10.2, the selling price of the high salience subjects drops much more between the weak-solidarity and the moderately strong orientation than the selling price of the low salience subjects ($t(df = 150): 2.9, p < 0.005$). The subjects with a high and low salience of gain did not differ significantly in their decrease of the selling price between the two orientations within the domain of the solidarity frame, i.e. between the moderately strong and the strong-solidarity orientation ($t(df = 150): -1.4, p < 0.161$ n.s.). This interaction effect between salience of gain and the solidarity frame was not included in the predictions, although it can be explained by the solidarity theory. According to the

Table 10.2 The means of the involvement variable by solidarity orientation (within subject) and salience of gain (between subjects)

Salience of gain	Solidarity orientation		
	Weak	Mod. str.	Strong
Low	1.87 ^a	4.61 ^b	6.23 ^c
High	2.07 ^a	4.60 ^b	6.10 ^c

^{a,b,c} The means that have different indices differ significantly ($p < 0.05$)

framing theory, direct effects within the frame exert a greater influence than indirect effects (from outside the frame). The strengthening of the wish to make as much profit as possible is most likely in a situation where making a profit is the primary goal (frame). Thus, the difference in the importance of profit will show up more in a weak-solidarity orientation where gain is the primary goal than in a strong-solidarity orientation where solidarity is the primary goal.

This interpretation is strengthened by the fact that the differences are not due to different levels of involvement. The results for the involvement variable show no main effect (mult. $F(df = 1,150)$: 0.01, $p < 0.906$) and no interaction effect for salience of gain and solidarity orientation on the level of involvement with the other person (mult. $F(df = 2,149)$: 0.61, $p < 0.545$). As expected, the more important the normative, relational dimension is in the three solidarity orientations, the greater is the involvement with the other (see Table 10.2). The factor solidarity orientation has a main effect on the level of involvement. The conditions differ significantly from each other (the contrast between weak and moderately strong-solidarity orientation: $t(df = 151)$: -16.4, $p < 0.001$; the contrast between moderately strong and strong-solidarity orientation: $t(df = 151)$: -13.1, $p < 0.001$). Thus, the involvement differs by solidarity orientation (as expected), but not by role of the subject, which is in accordance with the theory.

To summarize, when the actual frames of the average subject are taken into account, the results concerning the level of the selling price support the solidarity and salience hypotheses. The predictions described in the solidarity hypothesis concerning the weak and strong-solidarity condition are quite close to the subjects' observed prices. Furthermore, regarding the salience hypothesis, the results support the implication from the framing theory that direct effects are stronger than indirect effects.

The acceptability of proposed selling prices. In the above section, the results were discussed in terms of the level of selling price asked by the subjects. These results showed there is indeed a (non-linear) framing effect. However, there is another method to check on the central framing hypothesis concerning the difference between the gain and solidarity frames

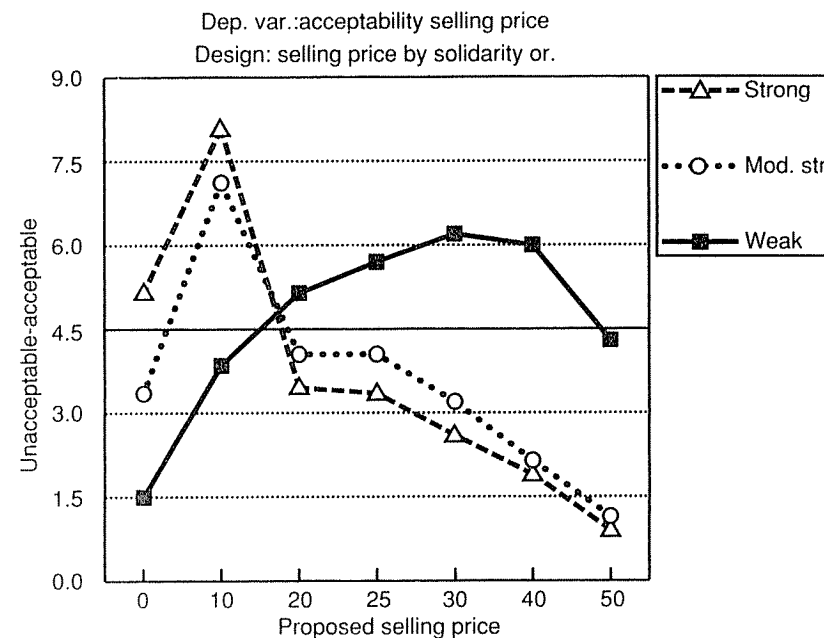


Figure 10.3 The effect of the solidarity orientation by the level of the proposed selling price on the acceptability of asking such a selling price

(see Figure 10.1): to examine the acceptability of the several proposed selling prices. A question about the acceptability of proposed selling prices was asked in the context of the first scenario. This is a between-subjects factor. Framing means that a situation is seen as qualitatively different in one frame from another frame. Thus, if there is a framing effect then the three conditions should not form a continuum. Rather, the acceptability curves for the solidarity frame (moderately strong and strong-solidarity orientation) should resemble each other and be qualitatively different from the acceptability curve for the gain-frame (i.e. the weak-solidarity orientation, in which profit was supposedly the primary goal). The means of acceptability of the proposed selling price are graphically presented in Figure 10.3. Note again the meaningfulness of the midpoint (4.5) of the scale for this variable.

Figure 10.3 indeed shows a similar pattern for the moderately strong and strong-solidarity conditions in contrast to the curve for the weak-solidarity condition. Except for the proposed selling price of 20 guilders, the means of both strong-solidarity orientations are significantly different from the means of the weak-solidarity orientation. These results corroborate the findings for the within-subject factor, that were depicted in Figure 10.2.

Furthermore, it is clear from Figure 10.3 that the selling prices the subjects find most acceptable are in accordance with the prediction for strong and weak solidarity: with a strong-solidarity orientation subjects find a proposed selling price of 10 guilders most suitable, with a weak-solidarity orientation, subjects find 30 guilders most acceptable.

SUMMARY AND DISCUSSION

This study focused on two central tenets of the solidarity theory: that the relationship between transaction parties tempers gain maximization and that a weak-solidarity relationship does so differently from a strong-solidarity relationship.

The results showed a substantial effect for the type of solidarity orientation on the level of the subjects' selling price, as well as on the acceptability of the proposed selling prices. In the weak-solidarity orientation condition, it was predicted that subjects would ask an equitable selling price (about 30 guilders). It was reasoned that these subjects structured the situation primarily according to the gain maximization but with relational signalling. Making a profit is most important to them, although the choices made are tempered by the importance placed on the relationship. The results confirmed this prediction, the subjects asked 33.47 guilders and found 30 guilders to be the most acceptable price. In the second condition, when the subjects had a strong-solidarity orientation, a selling price equal to cost price, i.e. 10 guilders, was predicted. The subjects would be primarily focused on conforming to solidarity norms and thus would avoid making profit off a friend. This too was confirmed. The mean selling price the subjects asked was 11.52 guilders and the most acceptable price was indeed 10 guilders. The prediction that in a purely opportunistic relationship subjects would ask the maximum price could not be tested. Individuals always felt some involvement with another person, even if the latter was a stranger. Thus, at least in this experiment, the purely opportunistic orientation could not be reproduced. Perhaps this does support the contention that an established market economy is permeated with weak-solidarity (see Lindenberg, 1988) and it casts some doubt on the standard assumption of a purely opportunistic orientation in micro-economics.

It should also be mentioned that the effects could have been produced by some implicit time-perspective in the relationship. People might have expected to interact more frequently in the future with a friend than with an acquaintance and a stranger. If that is so then arguments relating to the super-game literature might be important. However, in a sequel experiment (to be reported elsewhere) we did control for time-perspective and did not find pricing differences.

One aspect of the framing theory is the impact of salience of the frame on choice. This was tested by the salience hypothesis. As predicted, the subjects

in the high salience condition in general valued profit more than subjects in the low salience condition. Furthermore, as could be expected, the importance of profit influenced choice much less when the frame was solidarity rather than gain. A solidarity frame really pushes profit opportunities into the background.

All in all, the experiment confirmed that relationship is an important factor which must be taken into account in economic transactions. Furthermore, the results showed that a relationship can be described in terms of two global dimensions, gain and the normative or relational dimension, and that those dimensions 'frame' situations differently. The framing theory of choice offers a coherent framework for explaining the impact of norms without denying self-interest and rational choice.

APPENDIX

Checks. The subjects could imagine the situations very well (mean 6.5; s.d. 1.5) and took answering the questions very seriously (mean 6.1; s.d. 0.7). Both variables were measured on a seven-point scaled bar. No subject had to be removed from the analysis on the basis of low scores on these variables. The means did not vary significantly between the conditions.

The six different sequences of the within-subject factor **solidarity** affected some of the dependent variables. Subjects were influenced especially in the sequences where the stranger-condition preceded the other two conditions or the good friend-condition followed one of the other conditions. In general, it appeared that the subjects reacted less extremely to the stranger if this was the first condition than the subjects who confronted a stranger in the second or third condition. However, the three scenarios were analysed independently of the order in which they were presented. All possible sequences had been used, so overall, the sequence effect was cancelled out.

The experimental manipulation was checked by looking at the variables: the **relative importance** of profit versus relationship (a nine-point scaled bar), which was measured separately and the value of the relationship, the value of profit (both seven-point scaled bars).

A direct test of the subjects' type of frame is to look at the form of solidarity orientation (operationalized as the type of relationship) and the relative importance of profit versus the relationship. The variable 'relative importance' was measured directly and describes the importance of profit over relationship (or the relationship over profit) in determining the selling price. The means are shown in Figure 10.4. Along the Y-axis the type of the solidarity frame is indicated: above 4.5, profit is more important than the relationship (weak-solidarity frame), below 4.5, the relationship is more important than the profit (strong-solidarity frame).

The results of the MANOVA analysis show a significant multivariate effect on the relative importance of the type of relationship (solidarity mult.

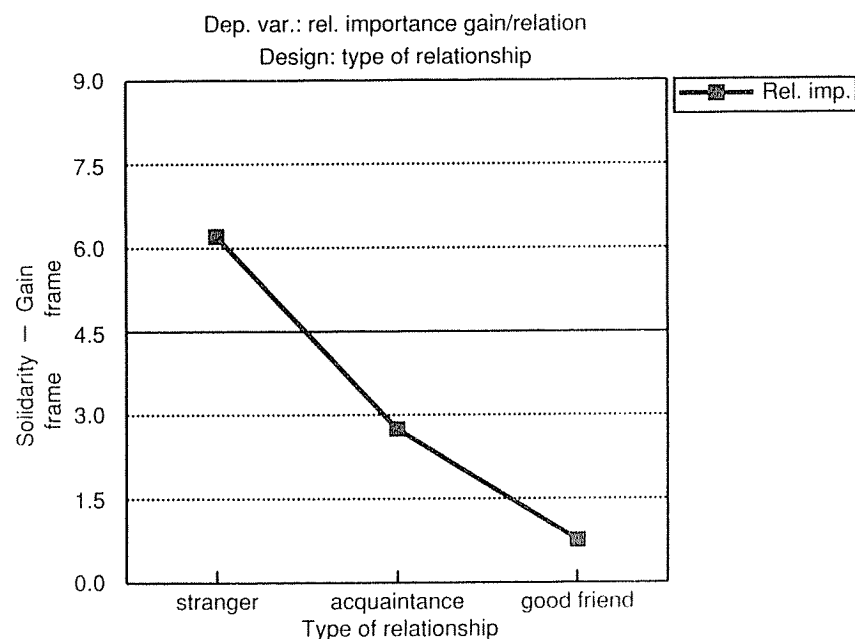


Figure 10.4 The effect of three types of relationship on the relative importance of profit over the relationship (midpoint = 4.5)

$t(df = 2,148): 466.3, p < 0.001$). All three contrasts among the three types of relationships were significant (stranger–acquaintance contrast: $t(df = 148): 17.9, p < 0.001$, and acquaintance–friend contrast: $t(df = 148): 13.5, p < 0.001$).

The results depicted in Figure 10.4 show that in terms of the impact, the subject dealing with a stranger had in fact a weak-solidarity orientation rather than an opportunistic one. The mean value (6.19) lies in the domain in which

Table 10.3 The means of the value of the relationship and the profit for the different solidarity orientation conditions (between subjects)

Solidarity orientation	Mean value relationship	Mean value profit	n
Stranger	3.1 ^a	5.0 ^a	55
Acquaintance	5.3 ^b	2.7 ^b	50
Good friend	6.1 ^c	2.3 ^b	49
Overall	4.8	3.4	154

^{a,b,c} The differences between the means with different indices within each column are significant

profit is the dominant principle, but this dominance is not as extreme as can be expected in an opportunistic orientation. Furthermore, the subject related to an acquaintance actually had a moderate form of a strong-solidarity orientation (the mean value is 2.71) instead of the expected weak-solidarity orientation. The subject related to a good friend showed, as expected, a strong form of a strong-solidarity orientation (the mean value is 0.75). In short, the actual frame of the average subject in the stranger and acquaintance conditions differs from the frame he or she was designed to have according to the experimental operationalizations.

The results of the separate measurements of the value of the relationship and the value of the profit show the same pattern. The means of these variables are summarized in Table 10.3.

Both value variables have a significant multivariate effect for the type of relationship (type of relationship, mult. $F(df = 4,294): 38.9, p < 0.001$). The simple effects among the three conditions show that the value of the relationship differs between all three levels of the solidarity orientation (tested between subjects; stranger–acquaintance contrast: $t(df = 103): -7.3, p < 0.001$, and acquaintance–friend contrast: $t(df = 97): -3.9, p < 0.001$). In other words, subjects who were in contact with a stranger valued the relationship less than subjects related to an acquaintance, and these subjects valued the relationship less than the subjects in the good friend condition.

The value of profit differs between the levels of the relationship (simple effects tested between subjects; stranger–acquaintance contrast: $t(df = 103): 7.9, p < 0.001$), but there is no difference between the good friend and acquaintance conditions (acquaintance–friend contrast: $t(df = 97): 1.2, p < 0.236$). As expected, the value of profit did differ between the subjects who had a low salience and those with a high salience of the frame. The high salience subjects (acting as a bookseller) placed a higher value on profit than the low salience subjects (student) (salience of gain, mult. $F(df = 2,147): 9.0, p < 0.001$; univariate contrast between low and high salience ($t(df = 147) = -3.1; p < 0.002$)). The means were 3.9 and 2.95, respectively.

The results of the two variables support the general tendencies which were anticipated in the use of the relational operationalizations. Along the line of stranger, acquaintance and good friend the value of the relationship increased and the value of the profit decreased. However, like the results of the variable **relative importance** mentioned above, the absolute mean values of **relationship** and **profit** suggest that even the 'stranger' relation was still constrained by some relational considerations (see Table 10.3). Subjects related to a stranger still valued the relationship at a level of 3.1 on a seven-point scale. In addition, these subjects only valued the profit at a level of 5.0 on a seven-point scale.

NOTES

- 1 We gratefully acknowledge Professor Dr H. A. M. Wilke for comments on the early versions of the paper.
- 2 This model – the discrimination model – is also tested in a more general context (see Braspenning, 1992).
- 3 The precise mathematical form is not central to this paper and will therefore not be presented (see Lindenberg, 1988).
- 4 Other hypotheses on contracting, based on the solidarity theory, have been worked out (see Lindenberg, 1988; Lindenberg and Ligthart, 1989). These hypotheses will be tested in subsequent studies.

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