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Trust as a Determinant of Consumer Behaviour in Food Safety Crises

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Trust as a Determinant of Consumer Behaviour in Food Safety Crises

Leef H. Dierks[1] and C.-Hennig Hanf[1]

Abstract: Based on an enhancement of Ajzen's Theory of Planned Behaviour, this article investigates German consumers' trust in different sources of information. Moreover, it discusses the settings and the extent to which consumers' trust influences consumers' behaviour both in the case of a standard purchasing situation and in the environment of a hypothetical food safety incidence such as bird flu. Results indicate that both the consumers' attitude and their trust in suppliers of information is a crucial factor determining their behaviour under uncertainty.

Keywords: *consumer behaviour, uncertainty, trust, food safety*

1 Introduction

In recent years, the European Union has experienced a large number of severe food safety crises which have often been accompanied by considerable demand and profit collapses. The prevailing and established concepts of demand analysis such as neoclassical microeconomic approaches, for instance, do not provide an utterly adequate description of consumer behaviour in a food safety crisis. The subjective Expected Utility Theory, for example, fails to explain consumers' abrupt and strong reactions in a food crisis which are evidently determined by other than exclusively economic patterns.

In order to account for these features, the traditional analysis of consumer behaviour under uncertainty is complemented by additionally considering behavioural aspects. Among the most relevant characteristics, particularly with regard to non-transparent and hazardous situations, is the element of trust. Commonly, its consideration can be accepted as a rational strategy to reduce uncertainty in the context of decision making; most notably involving the purchase and consumption of goods mainly possessing credence qualities. As this applies to nearly all foods, the significance of trust as a determinant of consumer behaviour under uncertainty might be considered as being equally important to economic factors.

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The scientific interest in analyzing the impact of trust as a determinant of consumer behaviour under uncertainty does not only arise from significantly contributing to a more in-depth understanding of the nature, the determinants and the process of consumer behaviour under uncertainty – but also from complementing economic theories to that effect that consumers' behavioural patterns are understood as influencing consumer behaviour in a manner comparable to classical economic elements such as income and price. Such completions prove to be indispensable for guiding a coherent description of consumer behaviour under uncertainty and for predicting consumers' likely reactions in the environment of random external shocks.

2 Modelling trust as factor in food demand analyses

Despite the wide-spread understanding of the increasing importance of behavioural elements like trust for an analysis of consumer behaviour, an embedding of the concept into economics is only little beyond its fledgling stages (Hosmer, 1995, p. 380). Trust and the conditions under which it might be considered as a market determinant have so far only been sketchily discussed and applied incompletely to consumer behaviour under uncertainty (Misztal, 1998, p. 29).

Regardless of the renascent interest in a conceptualisation of the multifaceted element of trust in recent years, the prevailing methodological diversity mostly circumvents a distinct definition of trust. Yet, the perhaps most commonly used concept of trust – particularly in the environment of economics – implies a disposition towards trusting behaviour; i.e. behaviour accepting vulnerability based upon the personal expectation. Nooteboom (1996, p. 246) remarks that *'X trusts Y to the extent that X chooses to cooperate with Y on the basis of a subjective probability that Y will choose not to employ opportunities for defection that X considers damaging, even if it is in the interest of Y to do so. The trustworthiness of Y depends on Y's true propensity to employ those opportunities'*.

One of the first elementary approaches to analyze trust in the perspective of a rational choice model of neoclassical economics has been presented by Coleman (1990, p. 99). His approach is based on the postulate of maximizing utility under uncertainty and requires the *trustor* to decide between investing trust – which would yield an expected utility of the expected value of a potential gain less the expected value of a potential loss, and not investing trust – which would not change his utility. The decision whether or not to trust the *trustee* is based on the probability that the trustee is trustworthy, the potential gain, and the potential loss that might occur if the trustee is not trustworthy. It appears logically consistent to consider trust as a *subjective probability* in the above context.

One of the first *multilevel* approaches to formally introduce the element of trust into decision making under uncertainty was undertaken in Böcker and Hanf's (2000) seminal model of individual information processing. The model proposes a two step risk perception process in which differences in the reliability between single types of suppliers are captured by subjective failure probabilities. Thus, trust is understood as a subjective probability that the trustee, i.e. the supplier of a food, is reliable. Formally, consumer K distinguishes between two different types of suppliers. Whereas suppliers of type A are regarded as reliable, those of type B are assumed to be less reliable. Consequently, K judges the probability $P(G \mid A)$, to purchase an unsafe item from type A to be smaller than $P(G \mid B)$, the respective failure probability assigned to type B. Referring to available information and personal experience, K generally purchases from supplier J which he presumes to be of type A. Since K does not possess perfect information, however, he cannot be sure that J actually belongs to type A. His trust in J to be reliable is expressed through the subjective probability P_J, leaving a residual probability of $(1 - P_J)$ for J belonging to type B. Naturally, K can modify his decision to purchase a potentially unsafe item X anytime by replacing it through substitute Y which he considers to be more secure. The substitution, however, would require that the expected utility

of Y exceeds the expected utility of X. The likelihood for K to purchase X depends on the subjective probability P_J. Böcker and Hanf (2000) assume that if K comes to know about the occurrence of a disconcerting incidence, caused by good X which J has sold, K will revise any prior belief P_J about J's reliability to the posterior probability P_{PJ}. P_{PJ} is the conditional probability of *'J being of type A'* after having observed that X is unsafe.

The following paragraphs will discuss approaches that evolved as conceivable alternatives to the Expected Utility Theory. Among these are as well the *Prospect Theory* as the *Theory of Reasoned Action*, which are both considered as methodological precursors to the *Theory of Planned Behaviour* (TPB), on which this paper will predominantly focus. The Theory of Reasoned Action, as introduced by Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980), aims at predicting the volitional behaviours and at comprehensively explaining their underlying psychological determinants. In doing so, the theory combines Fishbein's (1963) Attitude Theory and Dulany's (1967) Theory of Propositional Control which previously did not explicitly address social behaviour. Consequently, the Theory of Reasoned Action emphasises the impact of *behavioural* and *normative* beliefs on the consumer's intention to conduct a given behaviour (East, 1997, p. 134).

According to the Theory of Reasoned Action, intentions comprise two conceptually different determinants. The first predictor of intention is the consumer's *attitude towards the behaviour*, which refers to the degree to which a consumer has an either favourable or unfavourable evaluation of the behaviour in question (Ajzen, 1991, p. 188). The second predictor of intention is a social factor termed *subjective norm*, and refers to the consumer's perception of contingent social pressures to perform the behaviour in question. Subjective norms are a function of *normative beliefs* that indicate the likelihood that important individuals or groups in the consumer's social environment have in his selection of behavioural patterns. The consumer will intend to perform a certain behaviour when he

perceives it as being positively evaluated and as desired by the social environment – and vice versa.

The TPB differs from the Theory of Reasoned Action in its addition of a third determinant of intention; the *perceived behavioural control*, *PBC*. The perceived behavioural control refers to the consumers' perceptions of their ability to perform a given behaviour. In analogy to the attitudinal beliefs, perceived behavioural control is determined by *control beliefs*, i.e. beliefs about the presence of factors that facilitate or impede the performance of the behaviour in question. Control beliefs are mostly determined through the consumer's individual experiences, but also through information and experience of the social environment that influences the subjectively perceived difficulty of performing the behaviour in question. The more resources and opportunities individuals assume to possess, and the fewer impediments they anticipate, the greater is their perceived control over the behaviour (Ajzen, 1991, p. 196). Accordingly, the consumer's perceived behavioural control varies across situations and actions. The TPB is illustrated in figure 1.

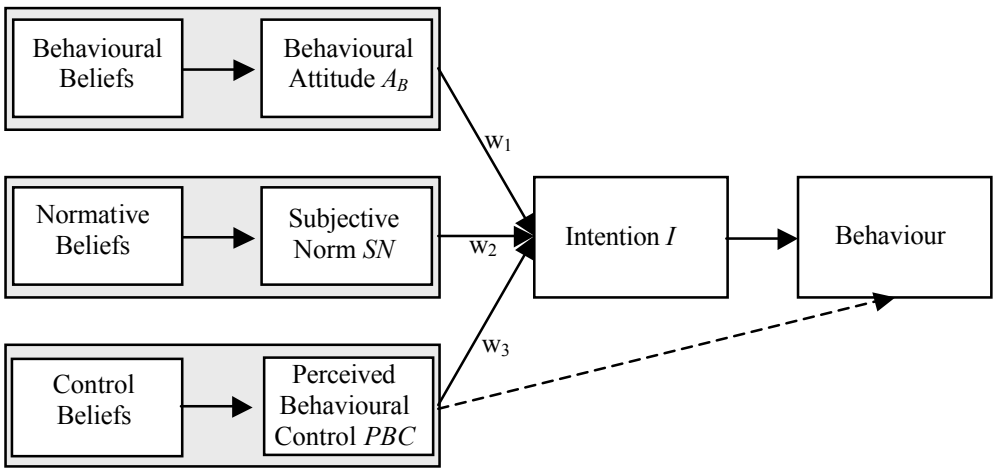

Figure 1: The Theory of Planned Behaviour. Source: Ajzen (1991, p. 182).

With reference to the previously discussed determinants of consumer behaviour under uncertainty, the TPB has been extended by Mazzocchi et al. (2004) towards the inclusion of *trust*, T, as an additional predictor of consumer behaviour. Trust was shown to be a crucial prerequisite for consumers to engage in economic interactions under uncertainty when the obtainment of complete information can only be ascertained at prohibitively high costs. This applies particularly for the credence qualities of a good (Darby and Karni, 1973, p. 69). Since trust under certainty, however, is tantamount to *knowledge*, any extension of the theory needs to include the element of *risk*, likewise. Consequently, emphasis will be put on the consumer's *perceived risk*.

The introduction of trust and perceived risk into the TPB has not affected the consumer's nonvolitional beliefs, i.e. the perceived behavioural control and its direct influence on the consumer's intention to perform a given behaviour. The system is expected to model the *average* relation among the *global* variables and the behavioural intention and ought to assess whether these relations vary according to other factors. In consideration of the fact that particularly information and socio-demographic variables ultimately determine the consumer's (volitional) beliefs, another extension of the original theory in order to comprehensively explain consumer behaviour under uncertainty seems inevitable (Mazzocchi et al., 2004). This conceivable revision of the TPB is depicted in figure 2.

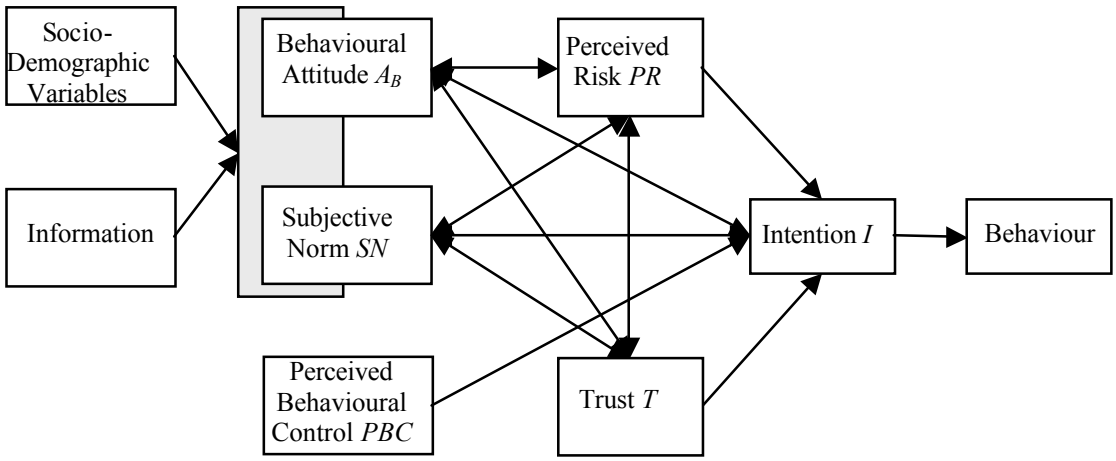

Figure 2: The Theory of Planned Behaviour – Extended (SPARTA model)

Due to a low correlation between certain determinants, the model was simplified as follows.

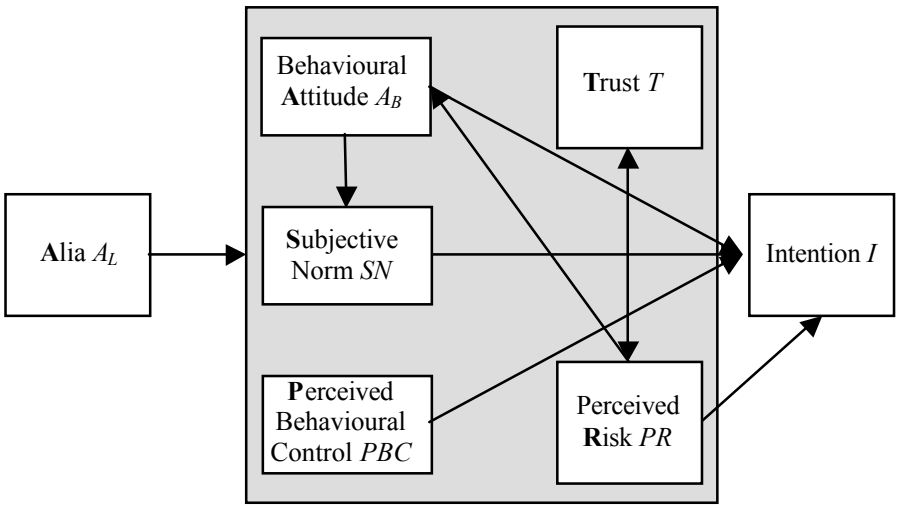

Figure 3: The SPARTA II Model. Source: Modified from Mazzocchi et al., 2005b, p. 23

3 Empirical Analysis of Trust as a Determinant of Consumer Behaviour

3.1 Data

The element of trust and its alleged impact on the consumer's intention to purchase was empirically assessed through a pan-European survey comprising 2,725 thirty minute face-to-face, in-home interviews with the family member responsible for purchase and/or preparation of food (Dierks, 2005). The interviews were conducted in spring 2004 throughout the United Kingdom, France, Italy, the Netherlands, and Germany. Since a sampling frame significant at

national level for those in charge of purchasing food is nearly impossible, it is obvious to maintain the household as the sampling unit and to ensure that the respondent is representative for the entire household. The sample is based on simple random sampling and probabilistic extraction which guarantees national representativeness.

Within the scope of European Commission's research project *Food Risk Communication and Consumers' Trust in the Food Supply Chain*, country-specific observations were transmitted to the University of Reading where the data was collated and processed. Subsequent to its conversion into a single data set, elementary statistical analyses and estimations were performed and then placed at the disposal of the respective cooperating institutions. This task was mostly performed by Lobb et al. (2005), Mazzocchi et al. (2005), and Cavicchi et al. (2005), whose efforts provide the data basis for the analyses conducted.

3.2 Quantifying Trust

Within the scope of the survey, respondents were asked to indicate their trust in information provided by selected sources on a seven point Likert scale. In an adjacent step, a factor analysis was performed on 451 German observations. Following a varimax rotation, the factor analysis yields five well distinguishable principal components whose loadings are depicted in table 1.

Table 1: Principal component loadings for trust in food safety information

	Components of Trust				
Information Source	T_M	T_F	T_I	T_A	T_V
Shopkeepers	-0.001	**0.823**	0.156	0.010	0.129
Supermarket	0.119	**0.792**	0.175	-0.059	0.206
Organic Shop	0.175	**0.715**	0.121	0.368	-0.069
Specialty Store	0.220	**0.780**	0.160	0.168	0.078
Farmers /Breeders	0.131	**0.739**	0.133	0.035	0.186
Processors	0.107	**0.609**	0.243	-0.102	0.467
Health Officials	0.207	0.288	**0.755**	0.091	0.045
University Scientists	0.160	0.165	**0.687**	0.229	0.151

National Food Authority	0.041	0.182	**0.818**	0.056	0.081
Government	0.161	0.118	**0.561**	0.086	**0.569**
Political Groups	0.162	0.101	0.262	0.291	**0.733**
Environmental Groups	0.138	0.058	0.219	**0.844**	0.166
Animal welfare Organisations	0.105	0.070	0.053	**0.881**	0.135
Consumer Organisations	0.208	0.113	**0.540**	0.482	-0.056
European Food Safety Authority	0.206	0.136	**0.659**	0.005	0.282
Television documentary	**0.705**	0.082	0.195	0.211	0.113
Television news / current affairs	**0.801**	0.089	0.288	0.035	0.007
Television advertising	0.196	0.312	0.016	0.104	**0.695**
Newspapers	**0.786**	0.193	0.125	0.149	0.047
Internet	**0.520**	0.048	-0.072	0.000	0.203
Radio	**0.824**	0.139	0.229	0.056	0.124
Magazines	**0.577**	0.247	0.125	0.102	0.431
Product Label	0.272	0.426	0.190	-0.028	0.445
Component Label	*Media*	*Food Chain*	*Independent*	*Alternative*	*Lobbies*

Note: A *varimax* rotation with Kaiser Normalisation has been conducted. The rotation converged in six iterations. Values exceeding 0.5 are printed bold.

In an adjacent step, a cluster analysis (hierarchical k-means cluster analysis) was performed on the observations. In accordance with the pan-European findings, the analysis was preset to three clusters (Dierks, 2005). Results are illustrated in table 2.

Table 2: Categorization of clusters featuring the German data set according to the k-means method

Clusters	1	2	3
Trust in media	-0.23	0.04	0.20
Trust in food chain actors	-0.94	0.60	-0.04
Trust in independent sources	0.38	-0.34	0.22
Trust in alternative sources	0.61	0.20	-1.22
Trust in vested interests	-0.17	0.39	-0.59
Absolute Counts	133	216	102
Percentage	29.49	47.89	22.62

Source: Dierks et al., (2005, p. 136).

As depicted in table 2, the first population cluster shows significant trust being expressed towards food safety information provided by alternative and independent sources. Strong distrust, however, is expressed towards food chain actors, and milder distrust towards media and vested interests. This implies that the first population cluster mainly comprehends alternative trusters with little confidence in classic institutions such as industry and media.

The second cluster suggests that the respondents assigned to this cluster appear to be directly opposed to the first population cluster since consumers display trust in nearly all sources of information. Since distrust is only expressed towards information provided by independent sources, this cluster appears to comprise consumers characterised as conservative trusters. The third cluster is characterized by trust being expressed towards information provided by media and independent sources whilst strong distrust, in turn, is expressed towards information provided by alternative sources, vested interests, and, even though to a negligible extent, towards information provided by food chain actors. The inconsistency of this pattern allows for characterising it as predominantly comprising sceptic trusters.

3.3 The SPARTA II Model

Following the classification of German respondents into three different population clusters, emphasis is placed on estimating the determinants of consumer behaviour in both a standard situation and after an external shock. The estimation of the SPARTA II model as outlined in figure 3 for both a standard situation and a hypothesised salmonella infestation aims at precisely identifying changes in consumer behaviour directly attributed to a the occurrence of a (hypothetical) food safety incidence.

3.3.1 Consumer Behaviour in a Standard Situation

As illustrated in figure 3, the consumers' intention to conduct a particular behaviour, I, is determined through the subjective norm, SN, perceived behavioural control, PBC, behavioural attitude A_B, and perceived risk, PR. Trust, T, in contrast, is assumed to have an indirect impact on consumer behaviour. The respective estimates for a standard purchasing situation, based on 377 German observations of which 31.8% correspond to alternative, 46.4% to conservative, and 21.8% to sceptic trusters, are depicted in table 4.

Table 4: Determinants of the SPARTA II Model for a standard situation

		Cluster		
Variable		Alternative Trusters	Conservative Trusters	Sceptic Trusters
	Constant	-1.2942 (0.7499)	-0.6704 (0.6998)	-1.0010 (0.8474)
SN	Subjective Norm	0.0691 (0.06956)	0.1587 (0.0577)	0.0943 (0.0866)
PBC	Perceived Behavioural Control	0.1588 (0.0951)	0.1388 (0.0802)	0.2281 (0.1127)
A_B	Behavioural Attitude	0.3989 (0.1061)	0.3814 (0.0942)	0.2723 (0.1306)
PR	Perceived Risk	0.1057 (0.0786)	-0.0424 (0.0585)	-0.0043 (0.1049)

Standard errors are put in parenthesis. Perceived risk, *PR*, is expressed as a weighed average of the respondents' perception of risk factors. The weighs correspond to the level of knowledge of the respective risk factors.

As illustrated above, the German consumers' intention to purchase chicken in a standard situation is predominantly determined through behavioural attitude, A_B. The differences regarding the impact of behavioural attitude, A_B, across the clusters indicate that respondents characterised as alternative and conservative trusters are influenced in a clearly stronger manner than respondents characterised as sceptic trusters. Interestingly, the opposite applies to perceived behavioural control, *PBC*, which has a stronger impact on sceptic trusters than it has on alternative trusters or conservative trusters. Normative beliefs, i.e. subjective norm, *SN*, also have a positive impact on all population clusters. Perceived risk, *PR* surprisingly has a positive impact on the intention to purchase chicken of respondents characterised as alternative trusters. Its impact on conservative trusters and sceptic trusters, however, is slightly negative – even though mainly negligible. Trust is effective in this model only via perceived risk – and considering that the latter has no significant impact on intention – it needs to be concluded that trust does not affect the consumers' intention in a standard situation.

3.3.2 Consumer Behaviour in the Environment of a Food Safety Incidence

Above estimates abruptly change once respondents are confronted with a hypothetical salmonella outbreak as particularly emphasised through the increasingly negative impact of perceived risk, *PR*. The respective estimates are illustrated in table 5.

Table 5: Determinants of the SPARTA II Model after a salmonella outbreak

		Cluster		
Variable		Alternative Trusters	Conservative Trusters	Sceptic Trusters
	Constant	-0.3650 (0.7405)	-2.7934 (0.7024)	-1.411 (0.8750)
SN	Subjective Norm	-0.0162 (0.0689)	0.0708 (0.0556)	0.0118 (0.0875)
PBC	Perceived Behavioural Control	0.0009 (0.0883)	0.2377 (0.0790)	0.1395 (0.1086)
A_B	Behavioural Attitude	0.2698 (0.0910)	0.3941 (0.0914)	0.2617 (0.1116)
PR	Perceived Risk	-0.2558 (0.0775)	0.0029 (0.0568)	-0.1503 (0.1009)

Standard errors are put in parenthesis. Perceived risk, *PR*, is expressed as a weighed average of the respondents' perception of risk factors. The weighs correspond to the level of knowledge of the respective risk factors.

In contrast to table 4, the above estimates are based upon 424 German observations. Of these, 33.0% correspond to alternative, 43.9% to conservative, and 23.1% to sceptic trusters. As in the standard purchasing situation, behavioural attitude, A_B, remains the decisive factor determining the consumers' intention to purchase chicken, *I*, in the environment of a hypothetical salmonella outbreak. Again, this also holds for all population clusters. Yet, whilst the impact of behavioural attitude on conservative and sceptic trusters remains nearly unchanged, the influence on alternative trusters deteriorates. Interestingly, this also applies to the impact of subjective norm, *SN*, on alternative, conservative, and sceptic trusters alike. Except for its influence on conservative trusters which nearly doubles, this furthermore applies to the impact of perceived behavioural control, *PBC*, on sceptic and alternative trusters. With exception of its negligible influence on conservative trusters, the impact of perceived risk, *PR*, increases. Following a food safety incidence, perceived risk significantly affects the consumers' intention to purchase chicken in a negative manner, most notably regarding sceptic and alternative trusters. Generally, the alternative trusters' intention to purchase chicken, *I*, appears to be particularly influenced through changes in the impact of

perceived risk, *PR*, attributed to the transition from a standard purchasing situation to the environment of a hypothetical food safety incidence, whilst other population clusters seem to react in a less distinctive manner.

4 Findings and conclusions

The ever increasing number of food safety incidences in recent years has accentuated the need for an improved understanding of the motives behind consumers' reaction to random external shocks. As literature research suggests, incorporating the element of trust can be interpreted as a plausible strategy to reduce consumers' uncertainty in the context of decision making, most notably involving the purchase of goods possessing mainly credence qualities. For the purpose of ascertaining the impact of trust on consumer behaviour under uncertainty and discussing the conditions under which trust might be regarded as a market determinant, emphasis is placed on its conceptual and statistical evaluation under divergent scenarios.

Results indicate that in standard situations, trust has a marginal impact on the consumer's intention to purchase. Generally, attitude appears to be the most relevant determinant. This, however, significantly changed when respondents are confronted with a hypothesised salmonella incidence. Abruptly, trust turns out to be among the most decisive factors influencing the purchasing decision. As results demonstrate, consumers' reactions appear to be non-linear in situations characterised through random external shocks.

Moreover, findings convincingly indicate that within a static approach, trust as a determinant of consumer behaviour under uncertainty can be adequately introduced into economic analyses by means of an enhancement of Ajzen's (1991) Theory of Planned Behaviour. In adjacent steps, two-level dynamic approaches as originally proposed by Böcker and Hanf (2000) should be further considered. This, however, remains subject to further research.

References

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Control and Human Decision Processes*, 50, pp. 179-211.

Ajzen, I., and M. Fishbein (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ, Prentice-Hall.

Böcker, A., and C.-H. Hanf (2000). Confidence lost and – partially – regained: consumer response to food scares. *Journal of Economic Behavior & Organization*, 43, pp. 471-485.

Cavicchi, A., A. E. Lobb, M. Mazzocchi, D. Romano, G. Stefani, and W. B. Traill (2005). *Cross-Country Segmentation*. University of Florence Working Paper Series on Trust, Deliverable Number 8. Florence, Florence University Press.

Darby, M. R., and E. Karni (1973). Free Competition and the Optimal Amount of Fraud. *The Journal of Law and Economics*, 16, pp. 67-88.

Dierks, L. H. (2005). Trust as a Determinant of Consumer Behaviour under Uncertainty. An Empirical Analysis of Consumers' Reactions to a Random External Shock in Europe. Göttingen, Cuvillier Verlag.

Dierks, L. H., M. Mazzocchi, and C.-H. Hanf (2005). Consumers' Reactions to a Food Safety Incidence in Germany. In: Maunsall, B., and D. J. Bolton (Eds.). *Food Safety Risk Communication: The Message and Motivational Strategies*. Dublin, Teagasc, p. 136.

Dulany, D. E. (1967) Awareness, rules, and propositional control: A confrontation with S-R behaviour theory. In: Horton, D., and T. Dixon (Eds.). *Verbal behaviour and S-R behaviour theory*. Englewood Cliffs, NJ, Prentice Hall.

East, R. (1997). *Consumer Behaviour: Advances and Applications in Marketing.* London, Prentice Hall.

Fishbein, M. (1963). An Investigation of the Relationships between Beliefs about an Object and the Attitude toward that Object. *Human Relationship*, 16, pp. 233-239.

Fishbein, M., and I. Ajzen (1975). *Belief, attitude, intention, and behaviour: An introduction to theory and research*. Reading, MA, Addison-Wesley.

Hosmer, L. T. (1995). Trust: The Connecting Link between Organizational Theory and Philosophical Ethics. *Academy of Management Review*, 20, pp. 379-403.

Lobb, A. E., M. Mazzocchi, and W. B. Traill (2005). *Report on Socio-Economic Determinants of Trust in the Food Chain*. TRUST-Project Deliverable No. 10, Florence, Florence University Press.

Mazzocchi, M., A. E. Lobb, and B. W. Traill (2004). *A strategy for measuring trust in food safety information: A literature review*. University of Florence Working Paper Series on Trust No. 18, Florence, Florence University Press.

Mazzocchi, M., A. E. Lobb, and B. W. Traill (2005a). *Modelling trust in food safety information and risk within the Theory of Planned Behaviour*. University of Florence Working Paper Series on Trust No. 28, Florence, Florence University Press.

Mazzocchi, M., A. E. Lobb, and B. W. Traill (2005b). *Causal Model Estimation results*. TRUST-Project Deliverable No. 9, Florence, Florence University Press.

Misztal, B. A. (1998). *Trust in Modern Societies. The Search for the Bases of Social Order*. 2nd ed., Cambridge, Polity Press.

Nooteboom, B. (1996). Trust, Opportunism and Governance: A Process and Control Model. *Organization Studies*, 17, (6), pp. 985-1010.