

The Relationship between Consumer Trust and the Value of Food Enterprises: A Case Study of COFCO Event

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Abstract: This study takes the COFCO incident as its case study to examine how consumer trust impacts the evaluation of food firms while appraising the complex consequences of a crisis of trust on such establishments together with their respective effective responses. Data was collected using questionnaires, which were later analysed using SPSS. According to the results of the investigation, the crisis of trust on food safety not only has a direct influence on consumers' purchasing behaviours but also causes huge challenges to the market, as well as the positioning and brand reputation of companies. This research not only constructs a significant theoretical framework for the food industry regarding trust management but also suggests helpful practical measures for organizations experiencing a crisis of trust.

Keywords: Consumer trust, Purchase Intension, Trast Crisis.

1. Introduction

Given the changes and trends in society, each business organization must change its mindset and approach during strategic creation and business operations to keep pace with the rapidly changing market situation and consumer demand. This is more so the food industry, where the increased health awareness and quality consciousness among consumers make it a matter of necessity for businesses to adhere to even higher standards in terms of safety, reliability, and accountability. When a food company suffers from the problem of poor-quality or unsafe products, it usually raises a lot of concern, swiftly erodes consumers' trust in the brand, and sometimes even shakes the company's market position.

In the present market landscape, consumer trust has increasingly emerged as a vital component of the intangible assets held by enterprises. Trust encompasses not merely the acknowledgment of product quality by consumers, but also extends to corporate reputation, brand image, and social responsibility. Consequently, the protection and restoration of consumer trust during crisis situations has become a critical concern in the realm of enterprise management.

This research paper uses the COFCO incident as a case study, precisely on this incident whereby vehicles which had been used to transport oil were now used to transport food. The study examines the effects of the event on consumers' trust and corporate value. The reason this incident was chosen is because a crisis of confidence in a food company can have a strong impact on customers' perception of the brand and their willingness to buy, therefore ultimately causing significant negative impacts on the company's market performance. Through the case study of COFCO, this study will make an in-depth analysis of the incident that happened to explore the mechanism of the trust crisis in its influence on corporate value and hence explain the relationship between consumers' trust and corporate value.

2. Case Background

2.1. Enterprise Background

The organization involved in this case is the China National

Cereals, Oils and Foodstuffs Corporation, whose acronym is COFCO. This corporation was established in 1949. This company is listed among the most important companies in the cereals, oils, and foodstuffs industry in China; it is also one of the world's top 500 companies. COFCO is a centralized institution with governmental affiliations, whose main business areas are grain and oil, food processing, international commerce, real estate, and finance, just to mention a few. The grain and oil area are the basic area of operation, where it performs activities from grain reserves, trading, and processing. COFCO is one of the major players in the grain and oil chain of China, playing a part and parcel role in the domestic market, while its overseas business network helps the process of internationalization of China's grain supply chain.

COFCO is the supply guarantor and brand leader in China's grain and oil market, covering the business scope along the complete industrial chain from field to table and holding high market influence. COFCO, with its scale effect and internationalized operation, sets a valuable reference for the management model and strategic decisions of the industry. However, such a position in industry also exposes it to greater scrutiny and society's pressure during crises. Since it is a benchmark enterprise in the industry, it has been under great focus from the market and the public since its development, which has made its strategic decision-making processes and crisis management capabilities a very valuable reference for such aspects.

2.2. Case Details

In this case, COFCO was embroiled in a deep consumer confidence crisis due to the incident of "using vehicles that had previously carried oil to transport grain." Although COFCO declared that the transportation vehicles went through strict cleansing and inspection procedures, and that the quality of the grain was not affected, consumer fears about food safety and questions pertaining to corporate social responsibility significantly rose. The incident has caused widespread social concern and sparked extensive media coverage, and the public has questioned the ability of COFCO to manage the transportation process and the importance it

attaches to food safety.

From public information, the core issue in this case study was the lapses in the selection and management criteria of transportation vehicles used by the company, which led to potential food safety risks. These lapses not only lost consumers' trust in the company but also had a very significant negative effect on COFCO's brand and market performance. For example, after the event, the consumer confidence and brand reputation of COFCO were negatively impacted to various degrees. During the event, COFCO's performance in the market showed variance, with a drop in sales of some grain and oil products, as well as a temporary fluctuation in their associated stock prices. Furthermore, the occurrence prompted regulatory bodies to enhance their oversight and administration of grain and oil transportation, thereby elevating compliance expenses for the future endeavors of the industry. The unfavorable feedback from consumers regarding the company disseminated swiftly, resulting in a temporary decline in both the company's market share and its standing within the industry.

3. Literature Review

3.1. Impact of Erosion of Corporate Trust on Firm Valuation

The erosion of corporate trust could have extensive adverse effects on the valuation of companies, particularly within the food sector. According to Vanhamme et al., a breach in consumer confidence can notably influence both a firm's market position and its financial outcomes [1]. Additionally, a trust crisis may result in alterations in consumer behaviour, including the preference for competing brands or a decrease in the frequency of consumption overall. With publicly traded companies, the trust crisis is usually reflected in a decrease in stock price and a loss of confidence among investors [2].

Food safety issues are often the triggers for crises of trust in companies. De Jonge et al. state that when consumers discover discrepancies in the production processes of a company, the erosion of trust accelerates, and once the trust is broken, it is difficult to repair [3]. The transportation issues that happened in this COFCO storage incident have caused a massive food safety concern for the consumers. Also, this event has hurt not only short-term sales performance but also damaged the long-term reputation of the brand [2]. Research has shown that a trust crisis may significantly influence the way a company operates its supply chain. Hong and Jeong noted that an incident described as a crisis can result in reduced effectiveness in the supply chain, increased costs, and deterioration in the relationships with suppliers [4].

Nevertheless, corporate trust crises have no permanent consequences. He et al. points out that swift public relationship campaigns, publicized rectification processes, and channels for consumer feedback after a crisis can lead to the recovery of trust [5]. Schoorman et al.'s study shows that the long-term negative impact of trust crises on the value of companies can be effectively mitigated through the establishment of long-term mechanisms of restoring trust, such as an open traceability of products system, better regulation [6].

3.2. Relationship Between Consumer Trust and Firm Value in Food Safety Contexts

Food safety incidents are a highly sensitive area affecting consumer trust and have a particularly profound impact on

firm value. Trust is not only a reflection of consumers' beliefs about the quality and safety of a company's products, but also directly determines consumers' purchasing behavior [7]. Jarvenpaa et al. for instance, showed that within the context of food safety crises, trust can serve to assuage consumers' fears vis-à-vis perceived risks thus reducing spread of negative behaviors [8].

In the case of COFCO, the incident triggered widespread public mistrust of food safety due to the use of vehicles that had carried oil previously for the transportation of food products. The resultant loss of trust significantly impacted the brand reputation and competitive position of the company in the market [2]. The loss of consumer confidence leads to a short-term decline in sales volumes, but it also causes irreparable damage to long-term brand loyalty and general market reputation. Gefen and Straub note that the breakdown of trust acts as a critical driver leading to a reduction in firm value and the consequent process of rebuilding that trust usually requires a significantly greater allocation of resources and time [9].

Despite this, the prevailing crisis of confidence simultaneously presents organizations with prospects for enhancement and optimization. Through the adoption of elevated food safety protocols, the augmentation of supply chain transparency, and the advancement of consumer education, businesses can progressively rehabilitate consumer trust in their brands (De Jonge et al., 2007). Anderson and Narus suggested that organizations can improve the effectiveness of restoring trust through reliable product traceability systems, share of periodical food safety reports as well as the development of mechanisms of consumer engagement [10]. In addition, Hofstede's study assumes corporate accountability and transparency when responding to crisis situations are fundamental components of the rebuilding of trust [11].

4. Theoretical Framework and Hypotheses

A review of extant literature reveals that consumer trust is a core determinant to firms' value, to the food sector, in which it significantly shapes consumers' decisions and competitive dynamics. Although crises of trust hurt the firm value substantially, they at the same time open the organization to opportunities for reflection and improvement. By crisis management, supply chain transparency optimization, and closer relationships with consumers, food companies could not only regain trust but also strengthen their market position and brand value. Further research could focus more on long-term maintenance of the trust of companies after a crisis and give references to the trust crisis management in other industries. This paper formulates Hypothesis 5 by focusing on this incident to deduce implications and conclusions that can be generalized throughout the industry.

H1: Consumers' trust in COFCO will decrease due to the trust crisis incident.

H2: Perceived corporate value has a positive impact on consumer trust.

H3: The right mindset and actions taken by the organizations in reaction to crises can indeed restore consumer confidence.

H4: Consumer trust has a significant effect on their purchase intention.

H5: Perceived firm value has an indirect effect on purchase

propensity through consumer trust (mediating role).

5. Empirical Study

5.1. Study Sample and Questionnaire Sources

The sample used in this research was obtained by random and purposive sampling methods to represent consumers in different areas of China. The selected population aged from less than 18 years old to more than 46 years old. Finally, 150 valid questionnaires were gathered with a roughly 1:1 male-to-female ratio. To obtain more extensive and wider conclusions, the questionnaires also elicited information about the respondents' educational attainment and monthly income. The questionnaire design relied on Gefen's (2000) Trust Scale, which covers several dimensions of the perception of trust, intentions of the trust response, and other facets under investigation. The questionnaire was designed using Sojump and distributed through online surveys on WeChat and Weibo, laying a good foundation for subsequent statistical analysis [12].

5.2. Reliability Testing

(1) Reliability Analysis

Table 1. Cronbach Reliability Analysis-Simplified Format

item count	sample size	Cronbach α coefficient
10	150	0.872

The most widely used indicator of the stability of questionnaire results is reliability. Reliability is the degree of consistency of results obtained from repeated measurements of the same phenomenon using a questionnaire, and reflects the level at which the questionnaire reflects the situation of the problem being investigated. In general, a questionnaire with a high level of reliability is not subject to chance error.

The questionnaire scale has several dimensions, and the overall reliability of the questionnaire scale is 0.872. A coefficient for each item of the measurement questionnaire ranges above 0.6, which shows that the questionnaire measurements have a high degree of stability, and the internal consistency of the questionnaire is relatively high, so that it can satisfy the needs of the study well.

(2) Reliability Analysis

Table 2. KMO and Bartlett test

KMO value		0.865
Bartlett Sphericity Check	Approximate chi-square (math)	709.205
	df	45
	P -value	0.000

Using principal component analysis for information enrichment research, first analyze whether the research data is suitable for principal component analysis, as can be seen from the above table: the KMO is 0.865, which is greater than 0.6 and meets the prerequisite requirements for principal component analysis, implying that the data can be used for principal component analysis research. As well as the data passed the Bartlett sphericity test ($p < 0.05$), which means that the research data is suitable for principal component analysis.

5.3. Descriptive Analysis

In terms of gender, there were 71 and 79 males and females, accounting for 47.33% and 52.67% respectively.

In terms of age groups, there were 24, 45, 37, 21, and 23 persons in the age groups of less than 18, 18-25, 26-35, 36-

45, and 46 and above, accounting for 16%, 30%, 24.67%, 14%, and 15.33%, respectively.

In terms of education level, there were 29, 47, 34, 23, and 17 in high school and below, high school, college, Undergraduate, and graduate school and above, accounting for 19.33%, 31.33%, 22.67%, 15.33%, and 11.33%, respectively.

In terms of monthly income, there are 14, 60, 45, 21, and 10 people with no, 5K and below, 10K-15K, 15K-20K, and 20K and above, accounting for 9.33%, 40%, 30%, 14%, and 6.67% respectively.

Table 3. Frequency Analysis Results

Name (of a thing)	Options (as in computer software settings)	Frequency	Percentage (%)	Cumulative Percentage (%)
1. Gender	male	71	47.33	47.33
	female	79	52.67	100.00
2. Age group	Less than 18	24	16.00	16.00
	18-25	45	30.00	46.00
	26-35	37	24.67	70.67
	36-45	21	14.00	84.67
	46 and above	23	15.33	100.00
3. Level of education	High School and below	29	19.33	19.33
	Congrats	47	31.33	50.67
	Three-Year college	34	22.67	73.33
	Undergraduate	23	15.33	88.67
	Graduate students and above	17	11.33	100.00
4. Monthly income	Not have	14	9.33	9.33
	5K and below	60	40.00	49.33
	10K-15K	45	30.00	79.33
	15K-20K	21	14.00	93.33
	20K and above	10	6.67	100.00
Add up the total		150	100.0	100.0

5.4. Related Analysis

Table 4. Pearson Correlation – Standard Format

	Crisis of Confidence Event Awareness	Corporate Crisis Management Attitude
Consumer Trust	0.750**	0.410**
* $p < 0.05$ ** $p < 0.01$		

As can be seen from the above table, correlation analysis was used to study the correlation between the perception of trust crisis events, corporate crisis management attitudes and consumer trust respectively, using Pearson correlation coefficients to indicate the strength of the correlation. Specific analysis shows that:

The correlation coefficient between perception of trust crisis events and consumer trust is 0.750 and shows significance at the 0.01 level, thus indicating that there is a significant positive correlation between perception of trust crisis events and consumer trust. Hypothesis H1 is valid.

The correlation coefficient value between corporate crisis management attitude and consumer trust is 0.410 and shows significance at the 0.01 level, thus indicating that there is a significant positive relationship between corporate crisis management attitude and consumer trust. Hypothesis H3 is valid.

5.5. Regression Analysis

Table 5. Results of Linear Regression Analysis (n=150)

	Non-standardized Coefficient		Standardized Coefficient	t	p	Covariance Diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
A Constant (math)	2.657	0.317	-	8.384	0.000**	-	-
Perceived Corporate Value	0.391	0.071	0.410	5.469	0.000**	1.000	1.000
R ²	0.168						
Adjustment R ²	0.163						
F	F (1, 148)=29.915, p=0.000						
D-W Value	1.602						
Note: Dependent = Consumer Trust							
* p<0.05 ** p<0.01							

As can be seen from the table above, the perceived corporate value is taken as the independent variable, while the consumer trust is taken as the dependent variable for the linear regression analysis, and as can be seen from the table above.

The regression coefficient value of enterprise value perception is 0.391 (t=5.469, p=0.000<0.01), which means that enterprise value perception will have a significant positive impact on consumer trust. Hypothesis H2 is valid.

Table 6. Results of linear regression analysis (n=150)

	Non-Standardized Coefficient		Standardized Coefficient	t	p	Covariance Diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
A Constant (math)	2.332	0.323	-	7.212	0.000**	-	-
Consumer Trust	0.475	0.073	0.472	6.512	0.000**	1.000	1.000
R ²	0.223						
Adjustment R ²	0.217						
F	F (1, 148)=42.405, p=0.000						
D-W Value	1.984						
Note: Dependent Variable = Consumer Propensity to buy							
* p<0.05 ** p<0.01							

From the above table, consumer trust as the independent variable, while the propensity to buy consumers as the dependent variable for linear regression analysis, from the above table can be seen that the regression coefficient value of consumer trust is 0.475 (t=6.512, p=0.000<0.01), which

means that consumer trust will have a significant positive impact on consumer purchasing tendency. Hypothesis H4 is valid.

5.6. Mediating Role

Table 7. Intermediation Test – Horizontal Format

Term (in a mathematical formula)	Notation	Significance	Effect	95% CI		Standard Error SE Value	z value/t value	p-value	Conclusion
				Lower Limit	Limit				
Perceived Corporate Value=>Consumer trust=>Consumer propensity to buy	a*b	Indirect Effect	0.080	0.014	0.189	0.045	1.775	0.076	intermediary
Perceived Corporate Value=>Consumer Trust	a	X=>M	0.391	0.251	0.531	0.071	5.469	0.000	
Consumer Trust=>Consumer Propensity to buy	b	M=>Y	0.204	0.089	0.320	0.059	3.465	0.001	
Perceived Corporate=>Consumer Propensity to buy	c'	Direct Effect	0.629	0.519	0.739	0.056	11.204	0.000	
Perceived Corporate Value=>Consumer Propensity to buy	c	Aggregate Effect	0.709	0.605	0.813	0.053	13.355	0.000	

Before data analysis, each continuous variable was standardized. The results of the analysis are shown in the table. Perceived corporate value significantly positively predicts consumers' propensity to buy ($\beta=0.629$, $p<0.001$), perceived corporate value significantly positively predicts consumer trust ($\beta=0.391$, $p<0.001$), and when perceived corporate value and consumer trust simultaneously predict consumers' propensity to buy, the positive prediction of consumer trust on consumers' propensity to buy is significant ($\beta=0.08$, $p=0.076$), and the positive predictive effect of perceived corporate value on consumers' propensity to purchase remains significant

($\beta=0.709$, $p<0.001$). In addition, the upper and lower bounds of Bootstrap 95% confidence intervals for the total effect, direct effect, and mediating effect of consumer trust of the impact of corporate value perception on consumer purchase propensity do not contain 0, indicating that corporate value perception not only significantly positively predicts consumer purchase propensity, but also significantly positively predicts consumer purchase propensity through the mediating effect of consumer trust. That is, consumer trust plays a partial mediating role in the influence of enterprise value perception on consumer purchase tendency, and hypothesis H5 is

verified.

6. Study Result

The present study confirms the proposed hypotheses through data analysis and proves the significant impact of the trust crisis on both consumer trust in COFCO and its corporate value. The results show that the COFCO storage incident has significantly weakened consumers' trust in the COFCO Group. This result suggests that when consumers question a firm's ability to manage food safety, their overall trust in the brand is seriously eroded especially in the highly sensitive industry like food. Consumers' perception of corporate value is significantly and positively correlated with trust. This means that in brand value creation, firms should further emphasize the social responsibility and sustainable development of the brand besides focusing on the products themselves. The transparent and timely crisis response moves of companies can indeed be important avenues to refashion consumer trust. The remedial measures of COFCO have, to a certain extent, arrested the erosion of trust; however, for full restoration, these efforts need to be continued over time. Consumer trust has a positive effect on purchase intention. It highlights the importance of trust as one of the core drivers in purchase decisions. Perceived firm value has an indirect effect on purchase propensity through consumer trust. This finding further explains the role of trust in bridging consumer behaviour and firm value.

The current study contributes to the literature on consumer trust and corporate valuation, especially about the mechanisms behind the trust in times of crisis. By testing and validating the mediation model, this study presents a more integrated theoretical framework for examining the dynamic interaction of trust crises with consumer behavior over time

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