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SCHUMPETER DISCUSSION PAPERS

Organizational Crises and Reactions from a Legitimacy Perspective – Results from Two Multiple-case Studies

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Abstract

Organizational crises can be conceptualized as interactions between organizations and stakeholders around the breach and reestablishment of common norms and social codes, i.e. perceptions of legitimacy. This paper contributes to the understanding of organizational crises by exploring the roles of dimensions of legitimacy in organizational crises as well as the role of different reactions in the resolution of crises. Results of two qualitative multiple-case studies based on analyses of media reports are presented. They suggest that crises are indeed characterized by a loss in legitimacy, the specific dimensions depending on the type of crisis. Moreover, results support the notion that the type as well as the timing of organizational reactions to crises is relevant to the effective handling of threatening events.

Introduction

Case studies of organizational crises have contributed greatly to advances in management research in the last decades. Examples are the Tenerife air disaster (Weick 1990), the loss of the space shuttle Challenger (Vaughan 1990), the industrial accident at Bhopal (Shrivastava 1992), or the Mann Gulch fire (Weick 1993). Specifically, these works extended our understanding of organizational sensemaking (Weick 1988, 1993), intraorganizational regulatory relationships and social control (Vaughan 1990) as well as information processing (Rudolph/Repenning 2002) as factors contributing to crises. An aspect which has been underrepresented in research on organizational crises is the social system within which crises unfold.

Only recently have scholars begun to conceptualize crises as interactions between organizations and stakeholders, through which these parties reestablish a sense of normalcy and negotiate a path back to a stable mode of operation (Pfarrer et al. 2008; Yu et al. 2008). This is important since organizations are dependent on stakeholders in order to survive (Carroll/Hannan 2000). Crises threaten shared values and commonly held beliefs in stakeholders and may be regarded as violations of uncertainty-reducing social codes (Carroll/Hannan 2000; Milburn et al. 1983; Pearson/Clair 1998).

The influence of social aspects on organizational crises may be framed through the construct of organizational legitimacy (e.g. Dowling/Pfeffer 1975; Suchman 1995), which features prominently in current organization theory (Deephouse/Suchman 2008). According to Suchman (1995: 574), an organization is deemed legitimate if its actions are “desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions”. Because crises are perceived by stakeholders as a breach of social codes, i.e. norms, values, beliefs, and definitions, they may be characterized as an unexpected loss of legitimacy. The literature on organizational legitimacy offers several conceptualizations, consisting of two to four dimensions (Aldrich/Fiol 1994; Aldrich/Ruef 2006; Scott 1995; Suchman 1995). Comparing these has revealed a considerable overlap between these concepts, allowing for the identification of four dimensions in total, namely moral, cognitive, regulative, and pragmatic legitimacy (Breitsohl 2009). *Moral* legitimacy is concerned with normative evaluations, *cognitive* legitimacy comprises comprehensibility and taken-for-grantedness, *regulative* legitimacy is awarded based on accordance with rules, and *pragmatic* legitimacy reflects whether the organization is perceived to be a valuable exchange partner.

As for crises themselves, numerous authors have proposed different definitions and classifications, varying greatly in terms of scope, dimensionality, delineation, and detail (e.g. Marcus/Goodman 1991; Milburn et al. 1983; Pauchant/Mitroff 1992; Shrivastava et al. 1988). When combining those typologies while maintaining a stakeholder perspective (Breitsohl 2009), three broad types of crises can be identified. *Scandals* comprise crises triggered by, e.g. bribery, insider trading, price-fixing, or sexual harassment. Their roots often lie within the organization, among its members, so it is generally feasible to identify the perpetrators and possibly even prevent the crisis. *Accidents* comprise events categorized by Shrivastava et al. (1988) as related to the production system, such as explosions, airplane crashes, or the sinking of ships. By contrast, they are much more difficult to control, since they are often caused by the complexity of tightly coupled systems (Perrow 1984). While failures of such systems are relatively rare, even when compared with other crises, they do occur, are difficult to prevent,

and are often devastating in their effects. *Product safety and health incidents* comprise post-production effects and consumption-side harms (Shrivastava et al. 1988), like sabotage, product defects and associated recalls, and production-related pollution. These are not as rare and causally ambiguous as accidents, but feature a combination of internal (production systems) and external (e.g. consumers) influences. For crisis in general, while some authors have noted a potential connection between crises and reputation, shared values and beliefs, and social codes (Milburn et al. 1983; Pearson/Clair 1998; Yu et al. 2008), little is known about the exact nature of this relationship.

With respect to the management of organizational crises, research has hitherto focused controlling contributing factors by establishing systems for crisis prevention (e.g. Hedberg et al. 1976; Smart/Vertinsky 1977; Turner 1976). Little attention has been directed at possibilities of handling threatening events *after* they have occurred. The literature on impression management (e.g. Elsbach 2003; Schlenker 1980; Tedeschi 1981) offers extensive knowledge on how organizations attempt to control perceptions in social interactions. It is therefore very useful in studying crises from a stakeholder perspective. In an attempt to consolidate the multitude of available conceptualizations of impression management techniques, Breitsohl (2009) has developed a typology featuring four classes of organizational reactions to crises, each comprising three types. Accordingly, *evasion* seeks to avoid any connection to a problematic event through retreat, concealment or denial. *Defense* involves acknowledging the existence of a problem without taking responsibility by disassociation, offering excuses, or defining the situation. *Appreciation* is chosen when responsibility is accepted in the form of explanation, justification or apology, but no further action is taken. Finally, *accommodation* is associated with actively seeking resolution through restitution, divorce, or restructuring. Regarding effects of such reactions, a few scholars have investigated strategies of influence within the context of problematic legitimacy (e.g. Ashforth/Gibbs, 1990; Elsbach 1994, 2001; Elsbach/Sutton 1992; Suchman, 1995). Yet, with the exception of Suchman (1995), most of these works treat legitimacy as a one-dimensional construct. Moreover, specific crisis management strategies have not been studied empirically from a legitimacy perspective.

It is therefore the goal of this paper to shed light on organizational crises by adopting a legitimacy perspective. More specifically, the roles of dimensions of legitimacy in organizational crises as well as the role of different reactions in the resolution of crises are to be examined. To this end, two multiple-case studies of nine and six real-world crises, respectively, were conducted. Study 1 examined the extent to which four dimensions of legitimacy were affected in different types of organizational crises. Study 2 compared crises in terms of the reactions

exhibited by the organizations involved. The remainder of the paper consists of reports on the methodology, samples, and results of both studies. It concludes with a discussion of implication of those results.

Study 1: Effects of Crises on Organizational Legitimacy

In order to identify testable relationships between critical events and organizational legitimacy, an exploratory study was conducted. As noted above, crises are rare events and, therefore, large-sample investigations are exceedingly difficult to undertake, although there are exceptions (Lin et al. 2006). Research on organizational crises typically consists of studies comprising one or few cases, which allow accounting for the complexity of such events. Since the goal was to identify candidate causal relationships, the first task was to strike a balance between creating an empirical base solid enough to support testable propositions, and keeping data collection and analysis manageable. In other words, the goal was not to inductively establish a theoretical model by testing hypotheses, but to explore whether a connection between organizational crises and legitimacy may exist and what its character may be. This indicated the need for employing case studies (Eisenhardt/Graebner 2007). More specifically, I chose a comparative multiple-case approach, following the “most different systems” principle (Przeworski/Teune 1970). Accordingly, if the variable to be explained, i.e. affected dimensions of organizational legitimacy, is the same for different cases, i.e. organizations, then the factors distinguishing those cases are irrelevant for the explanation. Thus, the goal was to gain robust propositions about relationships between organizational crises and legitimacy by selecting a diverse sample of cases.

Adopting the three crisis types identified by Marcus and Goodman (1991), I selected three cases for each crisis type, which will be outlined briefly below. This sample size allowed for a broad range of scandals, accidents, and product safety and health incidents, while keeping the necessary efforts for data collection and analysis within reasonable limits. The foremost criterion for selecting different cases within one crisis type was the focal organization’s industry. For instance, the cases for scandals cover an automobile manufacturer, a retailing chain, and an armored transportation provider. If more than three cases were candidates for investigation, selection was based on data availability.

Another important step in the research approach was to determine the method of data analysis. As noted, small-sample studies allow for rich descriptions and exploration. Furthermore, organizational legitimacy is inherently difficult to measure (Terreberry 1968), although some

authors have successfully used survey methods (e.g. Elsbach 1994). Other quantitative measures, such as performance indicators, were deemed inappropriate due to theoretical irrelevance or possible distortion (Emondson/McNamus 2007). By contrast, media reports are important indicators for organizational legitimacy (Deephouse/Suchman 2008). More specifically, corporate audiences draw on media reports when constructing assessments of reputation and legitimacy on which investment decision, career decisions, and product choices are based (Fombrun/Shanley 1990; Pollock/Rindova 2003). Researchers have therefore used media reports as measures for organizational legitimacy (e.g. Deephouse 1996; Hybels et al. 1994). Since the goal of this study was to identify possible relationships within the perception of crises by stakeholders in terms of legitimacy, a qualitative analysis (Miles/Huberman 1994) of media reports on crisis events appeared to be the optimal choice. The media included in the analysis were 86 articles from 12 major German newspapers and business magazines as well as their respective online versions. Employing a similar procedure as Marcus and Goodman (1991), articles from these sources reporting on the nine crises were analyzed with a focus on how the events were described in terms of legitimacy. Although the construct was not mentioned directly by the journalists, the reporting did contain judgments of whether the organizations adhered to rules (regulative), displayed immoral behavior (moral), or if the events endangered the organization's quality as an exchange partner (pragmatic) or its taken-for-grantedness (cognitive). The qualitative differences in reporting were classified as positive, neutral, or negative in tone. The goal was then to determine whether differences in affected dimensions of legitimacy could be observed between crisis types.

Summaries of cases

As noted above, the nine cases were selected to represent a broad range of crises within the respective types in order to gain a relatively robust empirical foundation – given the study's qualitative nature. The cases therefore feature organizations from different industries, as will be outlined below. In addition, where possible, the cases also reflect different subtypes of crises, resulting in a portfolio of cases covering many of the types from the established typologies by Pauchant and Mitroff (1992), Pearson and Clair (1998), and Shrivastava et al. (1988). Table 1 lists the represented subtypes. For instance, the three scandals were constituted by bribery, spying, and misappropriation, respectively. I now turn to a brief summary of the events triggering each of the nine crises.

The first *accident* involves the crash of a passenger train operated by *Deutsche Bahn*, the state-owned national railway company in Germany. On June 3, 1998, the high-speed train,

Table 1: Overview of case types analyzed

Accidents	Product safety & health incidents	Scandals
Passenger train crash	Lead-poisoned toys	Spying on employees
Explosion at fireworks plant	Baby food	Misappropriation of funds
Oil spill	Defective drug	Bribing of union representatives

travelling at approximately 200 kilometers per hour, derailed and crashed into the foundations of an overpass. 101 people were killed and more than the same number were injured. Investigations concluded that the main cause was a defective wheel rim. The second accident features an explosion at *S.E. Fireworks*, a large fireworks manufacturing plant in Enschede, the Netherlands. The accident occurred on May 13, 2000, killing 22 people and injuring hundreds. Furthermore, due to the plant's location within a residential area, almost 400 houses were destroyed and about 1000 more were damaged. The cause for the explosion has not been clarified completely. The third accident under study is an oil spill off the coast of Spain. The *Prestige*, a large 26 year-old single-hull tanker registered to a Liberian shipping company went aground on November 13, 2002, broke into two pieces and sank within six days, spilling several thousand tons of crude oil into the Atlantic Ocean. The resulting oil film polluted hundreds of kilometers of Spanish coastline, killing large numbers of wildlife and tarring beaches.

The first *scandal* involves the systematic practice of spying on employees at *Lidl*, a large German retail chain. Supposedly in order to prevent theft at over 200 of the company's stores, detective agencies were hired to collect information on personnel without notice, which was discovered in March 2008. For about half of the employees subject to this practice, the detectives' actions were illegal. The second scandal is linked to the bankruptcy of *Heros*, the then-leading provider of armored transport services in Germany. For several years prior, the founder as well as some top executives had been illegally withdrawing hundreds of millions of dollars from the company. This was accomplished by setting up a sophisticated scheme in which money taken from recent transports was replaced by taking on loans as well as money from new transports, driving up the company's financial debt. Bankruptcy was declared on February 20, 2006, within days after the illegal practices were discovered. The third scandal developed around several counts of bribery at *Volkswagen*, the largest automobile manufacturer in Europe. As was revealed in mid-2005, top executives had bribed union representatives on more than one occasion. This included inviting them on "business trips" where they would employ the services of prostitutes. Payments for such travels totaled in the millions of dollars

and were camouflaged as regular travel expenses or special bonuses, as investigations by an external auditor showed.

The first *product safety and health incident* involves the recall of close to one million products by *Mattel* in August and September 2007. These poisonous toys had been found to contain high levels of lead because the Chinese subcontractor performing the actual production had failed to adhere to the contract with the brand company. Unlike that case, the second incident did not pass without human victims, since it claimed the lives of two infants in the fall of 2003. These had been fed with defective baby food produced by *Humana*, a large German producer of dairy products, containing only one tenth of the amount of vitamin B1 reported on the packaging label. In addition to these two deaths, 13 children had to be treated due to the malnourishment. The third incident – and final case to be summarized – had consequences for a much larger number of people, when *Bayer* had to admit in August 2001 that *Lipobay*, one of its most successful drugs, was responsible for about 100 fatalities. For each of the nine crises, a qualitative analysis of media reports was conducted, the results of which will be presented in the following section of the paper.

Results

The analyses revealed different outcomes in terms of affected dimensions of legitimacy across crisis types. To a lesser extent, there was also some variation within crisis types, when comparing single cases. Overall, organizational legitimacy was affected negatively by the critical events. This is especially true for scandals and accidents, while the results for product safety and health incidents were more ambiguous. With respect to dimensions of legitimacy, moral legitimacy was most clearly jeopardized, followed by regulative and cognitive legitimacy. Results for pragmatic legitimacy were scarce and did not allow for a concise categorization. More specific findings for each type of crisis are presented below.

Accidents

In the three cases representing accidents, moral, cognitive, and regulative legitimacy were all negatively affected. Concerning moral legitimacy, stakeholders criticized the respective organizations for being overly oriented towards maximizing profits while neglecting standards of safety. Perceived violations of regulative standards were clear in only one of the cases. The same was found to be true with regards to cognitive legitimacy for a different case. Pragmatic legitimacy was not found to be reduced in any of the accidents studied. Examples of these findings are provided in Table 2.

Table 2: Affected dimensions of legitimacy for accidents by example

	Moral	Cognitive	Regulative	Pragmatic
Train crash	“time is money”; “wheel rims were used out of cost considerations”; “afterwards, trains were running again like after some usual malfunction”	“the day high-speed railway traffic lost its nimbus”; “the belief in supposedly safe travel by train [...] certainties that were shattered that day”; “there is a loss of image, no doubt”		
Fireworks explosion	“sloppiness and greed lead to the catastrophe”; “business was more important than the safety of the people around”		“factory was producing illegal fireworks”; “license did not permit the processing of explosives”	

As for the individual cases, reports on the *passenger train crash* reflected negative impacts on moral and cognitive legitimacy. Morally focused criticism was directed primarily at the fact that Deutsche Bahn had foregone checking the wheels on its trains in order to reduce costs. Similarly, the particular type of wheel rims mounted on the derailed train as well as many others had been chosen for its lower price. This was regarded as an immoral decision, placing economic principles over passenger safety. From a cognitive perspective, the crash seriously damaged the reputation of railway travel as being extremely safe – and thereby the image of the quasi-monopolist provider. Interestingly, some passengers aboard the ill-fated train were so convinced of its safety that even wheel-parts piercing the floor just before the crash did not prompt them to pull the emergency brakes. Although the accident was perceived to be related to a breach of social norms, regulative legitimacy was not found to have suffered. Indeed, a later court trial found three responsible engineers not guilty of contributing to the crash.

For the *fireworks explosion*, media coverage focused on moral and regulative aspects of legitimacy, which were both affected negatively. As could be observed for the train crash, the public perceived organizational practices at S.E. Fireworks to be immorally focused on profits. This judgment was based on the regulative assessment that the company had broken laws as well as industry standards when building the factory in the residential neighborhood. Furthermore, the products had been illegally manufactured and traded, and their storage had violated environmental and fire protection regulation. Due to the severity of the accident, the associated loss of legitimacy appears to have spread to the town administration, which had been

lax in enforcing safety rules at the factory. Signs for a general discussion about safety at fireworks factories were found for other countries as well.

The third accident, the *sinking of the oil tanker Prestige* turned out to be an unusual case in terms of organizational legitimacy, making it difficult to compare. While there was extensive media coverage of the oil spill, the owner of the ship could not be easily identified. As it was finally revealed, the ship was owned by a Liberian organization, operated by a Greek shipping company, chartered by a Swiss corporation, while sailing under the flag of the Bahamas. This ambiguity rendered the case more difficult to compare in two respects. First, since there was no clear “perpetrator”, most reports focused on the accident itself, simply because there was nothing to report on the organization behind the accident. Second, although there were protests by environmental activists, they remained relatively scarce and directed at the government, because they had no primary target. As Kostova and Zaheer (1999) have pointed out, attacking an unknown organization would have carried no benefits for the critics. From a more general perspective, the accident considerably damaged the already weak legitimacy of single-hull oil tankers.

Scandals

The three scandals under study were largely characterized by losses in moral as well as regulative legitimacy. Cognitive legitimacy was affected in only one of the cases. Similarly to the accidents described above, there were very few references to pragmatic legitimacy in the media reports on the scandals. Examples of these findings are provided in Table 3.

With respect to the scandal surrounding the *spying on employees* at Lidl, media reports were dominated by moral and regulative aspects, while no evidence was found for effects on cognitive and pragmatic legitimacy. Specifically, harsh criticism was directed at the company’s disregard of its employees’ privacy needs. One especially problematic part was the recording of how often employees used the restrooms at their workplace. Additional dismay was caused by the revelation that the company had systematically attempted to prevent the formation of workers’ councils through means of intimidation. In terms of regulative legitimacy, reports also emphasized the illegality of the spying practices. The reason for secretly observing employees put forward by the organization, namely protecting against theft, was not accepted by the public, partly because this course of action would also be illegal, except in cases of reasonable suspicion. Interestingly, it can be argued that, from a pragmatic perspective, theft prevention could have been used as a sensitive explanation for observing employees. However, this argument could not be identified in the media reports.

Table 3: Affected dimensions of legitimacy for scandals by example

	Moral	Cognitive	Regulative	Pragmatic
Spying on employees	“spying of unbelievable magnitude” “records intrude far into the privacy” “when and how often employees went to the restrooms”		“illegal observation by private detectives” “the limits of legality were crossed”	
Misappropriation of funds	“employees were intimidated in order to prevent the formation of workers’ councils”	“acquisition could not have possibly been financed through usual business” “up to the bankruptcy, Heros had established a pyramid scheme”	“large sums of money went into their own pockets” “the court ruled that the managers had misappropriated funds amounting to 250 million”	“customers terminated cooperation directly after the revelations”

The case of massive *misappropriation of funds* at armored transport services provider Heros showed similar results in that moral and regulative legitimacy were affected, with the addition of a loss in cognitive legitimacy. Pragmatic legitimacy was found to be mildly damaged. Specifically, investigation by journalists revealed that the success of the company, being the largest provider on a national level, was based on an elaborate pyramid scheme. Customer funds were not, as stated officially, transferred to trust accounts, but were used to lower service charges. This allowed Heros to drive competitors out of business in order to subsequently acquire them, securing market dominance. These insights, in conjunction with reports that other portions of customer funds were misused for personal enrichment of the founder and several top managers, called into question the success story and taken-for-grantedness of the company and thus severely undermined its cognitive legitimacy. Furthermore, both regulative and moral legitimacy suffered due the misappropriation as well as the fact that the company explicitly prohibited the formation of workers’ councils. Additional moral outrage was triggered by the finding that the company had often hired permanently unemployed persons since those were less likely to risk their jobs through whistle-blowing. Only one media report indicated a threat to pragmatic legitimacy, specifically the termination of business relationships by customers. It should be noted, however, that the company filed for bankruptcy very soon after the illegal practices were discovered, preempting further loss of its customer base. Finally, as was observed for the accident at a fireworks factory, the entire armored transports industry suffered from the scandal and reacted by introducing stricter standards of security.

The third scandal, involving the *bribing of union representatives* at Volkswagen, was found to be somewhat different in that media reports drew a clear distinction between the managers perpetrating bribery on one hand, and the company being damaged by those actions on the other. Problematic practices were not presented as typical for the organization, but as restricted to a small identifiable group of persons. Moreover, by comparison, reports on the bribing practices were relatively moderate in tone, indicating no emphasis of moral, regulative or pragmatic aspects. As far as cognitive legitimacy is concerned, the extent to which both external as well as internal stakeholders were surprised by the revelations suggested a potential threat to predictability of the company's actions. However, media reports downplayed the role of mistakes made on the part of Volkswagen. Overall, the company was described as having taken all necessary steps to prevent such problematic events. Therefore, organizational legitimacy was only weakly affected by the scandal.

Product safety and health incidents

For the third type of crisis, comprising events related to product safety and health, the dimensions of organizational legitimacy primarily affected were cognitive and regulative. Reports touching moral and pragmatic legitimacy were less frequent and clear. Overall, assessments of the incidents varied to a much greater extent compared to accidents and scandals. This was true between as well as within the three cases. Examples of these findings are provided in Table 4.

In the case of *lead-poisoned toys*, media reports stressed the toxicity and dangerousness of the toys, questioning the taken-for-grantedness of safety of the otherwise well-established Mattel products. Thus, reports of the threat to child health embodied by the toys challenged the company's cognitive legitimacy. Interestingly, related reports noting that other toy producers and retailers were suffering from similar problems as well as that 80 percent of all toys were produced in China – just like the products in question – did not mitigate the situation. A minority of stock analysts did interpret the product recalls as evidence for a functioning quality management system. This, however, did not affect the overall loss in cognitive legitimacy. The negative assessments of cognitive aspects were contrasted by positive regulative reporting with regard to the product recalls. Although, strictly speaking, the levels of lead found in the toys were illegal, the recalls were largely described as voluntary – and therefore commendable.

Similarly mixed results, yet on different dimensions of legitimacy, were found for the *baby food* case. The incident clearly undermined Humana's cognitive legitimacy. Having been

Table 4: Affected dimensions of legitimacy for product safety and health incidents by example

	Moral	Cognitive	Regulative	Pragmatic
Lead-poisoned toys		<p>“recalls have damaged the company’s reputation”</p> <p>“toys were taken off the market due to hazardous parts”</p>	<p>“Mattel was forced to recall contaminated toys”</p> <p>“toys merely crossed the very strict internal thresholds for lead”</p> <p>“thresholds for the EU and the US were definitely complied with”</p>	
Baby food	<p>“Humana takes responsibility”</p> <p>“Humana expresses dismay”</p>	<p>“Humana admitted massive flaws in product development”</p> <p>“mishaps in development and quality management”</p>	<p>“EU thresholds were vastly violated”</p> <p>“public prosecution has initiated investigations”</p>	
Defective drug		<p>“patients were very uncertain”</p> <p>“the image was tarnished”</p> <p>“no effective drug is free from side effects”</p>	<p>“Bayer had tested and launched Lipobay according to regulations”</p>	<p>“patients discontinued treatment”</p> <p>“Statins demonstrably reduce mortality and improve quality of life”</p>

recognized previously as an experienced provider of baby food, this taken-for-grantedness could not be sustained, despite management’s effort to present the incident as unique. From a regulative perspective, the death of two infants as a triggering event was, without doubt, a serious threat to legitimacy. This is true even though no intent or gross neglect on the part of the company or its employees could be identified. Interestingly, as in the toy case, the organization was applauded for its reaction to the product safety incident. Specifically, there were no reports on morally reprehensible conduct. Quite the contrary, the deliberate manner in which Humana handled the situation, including expressing sympathy, assuming responsibility, and proactively helping parents of affected children was presented in a positive light by the media. For last case under study, focusing on the *defective drug* Lipobay, effects for all dimensions of legitimacy can be reported, although results were scarce for moral, and diverse for pragmatic legitimacy. Again, as for the other two product safety and health incidents, results were mixed and more ambiguous than for accidents and scandals. A definite assessment for cognitive legitimacy was difficult. On one hand, taken-for-grantedness of the drug was reduced, such that some patients deliberately discontinued treatment without consulting their physi-

cians. Moreover, consumers were more insecure with respect to the entire class of cholesterol-lowering drugs. On the other hand, media reports pointed to the fact that some of the problems associated with the drug may have been preventable, had patients and doctors paid closer attention to the package leaflet, effectively exonerating the company. From a regulative perspective, Bayer appears to have come out of the incident without significant damage, mainly because no violations of the law could be proven. Although the actual legal status of a crisis may differ from its perception by the public, as seen in the lead-poisoning case, this was not found for this particular instant.

Conclusions from Study 1

To sum up, results from the nine cases indicate that, while all crises were characterized by losses in organizational legitimacy, crisis types differed in their effects on dimensions of legitimacy. Across crisis types, cognitive and regulative legitimacy were most frequently affected, although not always in the same cases. Moral legitimacy was found to be threatened in more than half of the crises under study. There were very few media reports touching on pragmatic legitimacy. A possible explanation lies within the delineation of pragmatic legitimacy: its focus is on the perception of an organization as an exchange partner (Suchman 1995). This may simply not be as relevant to the media as aspects more congruent with general interests of a diverse readership: moral issues, the adherence to rules, and the role of an organization in everyday life. Still, the results support the notion that losses in legitimacy lie at the heart of organizational crises.

With regards to the individual crisis types, accidents primarily affected moral legitimacy, with additional reductions in cognitive or regulative legitimacy. This is not entirely congruent with earlier propositions (Breitsohl 2009) suggesting that accidents primarily reduce cognitive legitimacy. However, the core of this discrepancy may not be the type of crisis, but that the particular accidents analyzed here were perceived to be caused in part by the companies themselves, making them borderline cases between accidents and scandals. This point will be discussed in more detail below. In addition, due to the massive impact of these particular accidents, they may have evoked more affective responses by the public than usual. Scandals were found to impair moral and regulative legitimacy, and, in one case, cognitive legitimacy. This supports the relationship proposed by Breitsohl (2009), as scandals are typically connected to “white-collar crime” as well as morally reprehensible actions, such as neglect and deceit. Effects on cognitive legitimacy are plausible since in some cases, e.g. Heros or, most prominently, Enron, the core of the scandal lies in creating an illegal business separate from

the legitimate façade. Revealing this divide between symbolism and substance would clearly threaten perceptions of comprehensibility. Finally, for product safety and health incidents, cognitive legitimacy was most dominantly reduced. Although not in complete concordance with earlier suggestions (Breitsohl 2009), this is plausible because problems associated to product safety may challenge perceptions of comprehensibility. More support is offered by the finding that regulative legitimacy was reduced in two cases, since governments often establish regulation designed to protect consumers from faulty products. The results for product safety and health incidents were relatively diverse between cases. This may be interpreted as support for the positioning of such events between accidents and scandal in typologies of organizational crises (Breitsohl 2009; Marcus/Goodman 1991).

The results from this study also point to a possible limitation of some typologies of organizational crises. Specifically, it remains unclear what exactly constitutes a scandal, i.e. what criteria could be used to delineate scandals. While for some types of crises, such as spying on employees, it is relatively easy to denote them as scandals. For other cases, it is much more difficult because they contain a mixture of problematic actions. For instance, there was some indication that the fireworks factory explosion may have been caused in part by illegal manufacturing procedures. Does this turn the accident into a scandal? The same may be true for the train crash, had there been clearer evidence for a neglect of safety for the sake of lower costs. On a related note, accidents often occur within the context of complex technologies (Perrow 1984), which are therefore highly regulated. Given that organizations are expected to exert control (Salancik/Meindl 1984), this may lower stakeholders' threshold to regard an accident as "scandalous" if only the slightest mistake in handling a complex technology became apparent. More generally, intention may be one criterion for delineating scandals. Another criterion may be the degree to which a group of perpetrators is separable from the organization as a whole. In the case of bribery of union representatives, the company suffered only small losses in legitimacy, because a small group of employees could be identified as responsible for the transgressions. For the armored transport case, the fact that one of the managers misappropriating company funds was also the founder may have worsened the public's perception of the company. By contrast, since it was very difficult to identify the organization behind the oil spill, there was no subject to condemn in terms of legitimacy.

As noted above, some of the media reports on product safety and health incidents were positive in tone, a somewhat surprising result given the inherently problematic nature of crises. A closer inspection of those specific reports revealed that they did not address the crises per se, but organizational reactions, i.e. the handling of the situation. For example, Mattel was com-

mended for voluntarily recalling defective products. Similarly, Humana's proactive and accommodative reaction to the baby food crisis was regarded as positive. A screening of the other nine cases yielded one more instance in which organizational reactions were evaluated instead of the crisis: Lidl unsuccessfully attempted to frame the practice of spying on employees as a theft-prevention program. These findings point to the importance of carefully separating between different effects, even within qualitative studies. More importantly, they support the notion that organizational reactions play an important part in the course of crisis and are worthy of further investigation, such the second study presented below.

Study 2: Efficacy of organizational crisis reactions

For the second study, focusing on the effect of organizational reactions to threatening events, I followed a different approach in selecting cases compared to Study 1. Since the focal aspect was crisis reactions by affected organizations, cases were chosen following the "most similar systems" (Przeworski/Teune 1970) principle. Accordingly, cases are selected to possess as many common traits as possible, so that important differences found in the comparison may be attributed to a small number of possible causes. In other words, "common systemic characteristics are conceived of as 'controlled for', whereas intersystemic differences are viewed as explanatory variables" (Przeworski/Teune 1970: 37). This required finding organizational crises which ideally share as many initial properties as possible in order to reduce variation and exclude this entire set of explanations (Eisenhardt 1989). Moreover, selected cases were to exhibit large discrepancies in their outcomes, so that it could be assumed that such differences are due the way in which the respective organization handled the crisis. Therefore, I chose two cases for each type of organizational crisis, resembling each other in terms of geographic locale, industry, and the specific type of crisis. This matching approach, combined with the low general frequency of crises, severely limited the number of (pairs of) cases to choose from. I therefore reused one of the nine cases already analyzed. More specifically, the six cases represent two passenger airplane crashes in Indonesia, two scandals involving spying on employees in large German companies, and two product safety and health incidents involving Chinese producers of milk powder. Similarly to Study 1, a qualitative analysis of media reports was conducted, using 155 articles from various online and print news outlets. If possible, news media from the countries in which the crisis took place were analyzed. In the cases of the Chinese producers of milk powder, international and German sources were drawn upon due to restrictions on independent reporting of Chinese media. All six cases will now be

summarized briefly, while the companies' reactions will be described and compared in more detail in the following section.

Summaries of cases

Accidents

On January 1, 2007, *Adam Air Flight 574*, en route from Java to Sulawesi, disappeared from radar in severe weather, after sending several emergency messages. The 17-year-old Boeing 737 was carrying a total of 102 passengers and crew. At the time, Adam Air was an important provider of air travel within Indonesia, serving 25 routes with 19 airplanes. The company had previously been subject to public scrutiny due to safety issues. The search for Adam Air 574 proved to be very difficult, despite large-scale support by the government, which deployed around 3,000 soldiers and volunteers, along with several ships and aircraft. It took ten days to discover the first parts of the wreck, and another six days to locate the flight recorder. However, the recovery of the flight recorder, the most crucial piece of evidence was delayed due to technical inadequacies. Adam Air assumed normal business activities, and the passengers and crew were declared dead. Meanwhile, another Adam Air Flight had to perform an emergency landing, prompting authorities to ground all of the airline's planes. After successfully demonstrating to investigators that safety at Adam Air was sufficient, an impending revocation of the company's license could be held off temporarily. However, a third incident involving an Adam Air plane in March 2008, followed by the departure of a major investor, led to the loss of Adam Air's license. Investigations later revealed that the third accident was caused by technical defects in conjunction with errors by the crew.

On September 5, 2005, *Mandala Airlines Flight 091* crashed into a residential area in the city of Medan directly after take-off. 149 people were killed, many injured, and over 30 houses were completely destroyed. There were 14 survivors. The government-owned company had been involved in minor incidents in the past, but was growing steadily and was planning to search for private investors. Recovery proceeded relatively swiftly and the flight recorder was found two days later, while official investigations were already underway. On that same day, another Mandala plane had to return to its origin shortly after departure due to technical problems. During the following days, after clean-up efforts at the site of the crash had begun, a third Mandala flight was refused permission to take off on grounds of technical inadequacies. The following months saw the payment of restitution to the victims as well as the rebuilding of the houses destroyed in the crash. Mandala Airlines was subsequently acquired by two in-

vestors and restructured comprehensively. It is now listed in the highest national safety class and has grown significantly.

Scandals

As noted above, one case from Study 1 was used again in Study 2 due to strict selection criteria for case pairs. This case is the one involving spying in employees at *Lidl*, the second-largest food retailer in Germany. For reasons of parsimony, a repetition of the details is omitted here, and the focus is now directed at the other scandal.

On May 24, 2008, *Deutsche Telekom*, Europe's largest provider of telecommunication services, announced that it had systematically monitored phone calls by managers, board members, and journalists during the years 2005 and 2006. Specifically, Telekom recorded and used information regarding times and dates, participants, and length of those calls, on both mobile and land lines. Ten days earlier, the CEO had filed suit against the company with the public prosecution office. Following the public announcement, workers' unions as well as the German association of journalists demanded quick clarification of the matter. The Federal Commissioner for Data Protection and Freedom of Information initiated official investigations. Meanwhile, Telekom's board of directors explicitly supported the CEO's handling of the situation, which later included the enlistment of two highly reputable experts for the development of a new data security system for the entire corporation. During the following months, several additional reports on problems in information security were published, although none of them were equally serious. In response to the scandal, Telekom created a new job for a Director of Data Security, endowed with a right-to-veto on all decisions touching aspects of data security. In addition, an external council for data protection was to be appointed, and employees' access to sensitive data was to be restricted. Although the corporation expected to incur a decrease in revenue for the first time in its history, the company report for the year 2008 showed a doubling in profits.

Product safety and health incidents

On September 11, 2008, it was reported that *Sanlu Group*, China's largest producer of milk powder, was involved in a major product safety and health incident. After consuming Sanlu's products, over 430 children suffered from severe poisoning with melamine, a substance used in the production of plastics. One infant died subsequently. Sanlu recalled several thousand tons of its milk powder. Five days after the first reports, the body count had increased to two deaths and over 1,200 ill. The Chinese government reacted by placing all producers of contaminated milk powder – 22 companies, as investigations revealed – under official oversight.

As the number of affected children kept rising, reaching a final number of 300,000 victims, the prime minister assumed control over the investigations. Numerous managers and officials were fired and arrested. A whole network of illegal factories producing melamine was discovered. Sanlu's largest investor finally sold all its shares. This, combined with waves of lawsuits, resulted in the company's bankruptcy in December 2008. Several managers were sentenced to death or long terms in prison.

In the course of the melamine crisis in China, another corporation under scrutiny was *Mengniu*, the country's largest dairy producer. After tests showed that about ten percent of Mengniu products were contaminated, the company took all of its products off the shelves. Large customers, such as Starbucks and Disney, removed Mengniu products from their assortments. The collapse in exports caused losses in the hundreds of millions of US-Dollars. In early 2009, the Chinese dairy industry established an aid fund for the victims of the crisis.

Comparisons within crisis types

Since the goal of this study was to gain an understanding of differences between successful and unsuccessful cases of crisis management, I compared the case pairs in terms of the progression of the respective crisis in general and organizational reactions in particular. In order to account for the temporal structure of the events, I divided the crises into four phases. These phases spanned the first two days (phase 1), the first week (phase 2), the first month (phase 3) after the triggering event, and the remaining time until the end of the crisis (phase 4). Organizational reactions were classified according to the typology outlined above (Breitsohl 2009).

Accidents

Comparing the two accidents revealed some commonalities as well as recognizable differences with respect to how the two airlines reacted to the crises, which are visualized in Table 5. Overall, neither of the two affected companies employed evasive tactics in their reactions. The two also displayed a similar total number of reactions over the course of their crises. However, their reactions differed in terms of both their distribution over the 12 types as well as their sequence and combination over time. A phase-wise comparison revealed the following patterns.

During the first few days (*phase 1*) after the crash of their plane, management at Adam Air merely confirmed that contact with an aircraft had been lost. When, despite rumors, no remains of Flight 574 could be found, a vice president attempted to excuse the situation by assuring the public that the pilot had acted in accordance with regulations and that the plane had

Table 5. Reactions to accidents over time by example.

	Phase 1	Phase 2	Phase 3	Phase 4
Evasive				
Defensive	<p><u>Adam:</u> “We don’t have the exact data about the weather [...] but it was flight-worthy.”</p> <p><u>Mandala:</u> “They were declared fit to fly.”; “It’s difficult. It’s supposed to be more organized.”</p>		<p><u>Adam:</u> “I have never done any [...] cost cutting in our maintenance sector. Maintenance takes up to 40 percent of operational costs.”</p>	<p><u>Adam:</u> “The worst punishment ever imposed on a national airline”; “premature”.</p>
Appreciative			<p><u>Adam:</u> “I haven’t had the chance to give a public explanation because I was in Makassar assisting the search.”; funeral service for the victims.</p>	
Accommodative	<p><u>Mandala:</u> Creation of crisis management center; free flights and passenger list. “We will pay compensation, but now our team is still calculating it.”</p>	<p><u>Adam:</u> Relatives of victims flown to Makassar.</p> <p><u>Mandala:</u> “The evacuation is aimed at clearing [...] so that traffic returns to normal.”</p>	<p><u>Adam:</u> “We will pay the compensation [...] Our management has informed the families about that.”</p> <p><u>Mandala:</u> “We will use the criticism to improve”; “the compensation is for all victims, both passengers and residents”; “we were ordered to rebuild [...] all financed by Mandala”.</p>	<p><u>Adam:</u> Compensation affirmed again; salvage vessel hired.</p> <p><u>Mandala:</u> Emphasis of swift restitution after seven weeks. “Mandala Airline’s responsibilities will be over once the cash payments are made.”</p>

been airworthy. Otherwise, no reactions by Adam Air were reported. By contrast, Mandala Airlines, besides also pointing to the good technical condition of their plane, immediately created a crisis reaction center, published a list of the passengers aboard Flight 091, and supplied free flights to Medan for relatives of the victims. The company had to face some criticism for the publication of the passenger list when it was discovered that not all of the listed victims had actually been on the plane. Mandala reacted by admitting to mistakes, yet blaming insufficient security checks at the airport. In addition, restitution for all aggrieved parties was announced. When another Mandala flight had to return to its origin, this was explained as evidence of the high priority the company placed on its passengers’ well-being.

Within the remainder of the first week (*phase 2*) after the crashes, both airlines reacted only scarcely to the progressing crises. Adam Air, in response to fruitless search efforts for the wreck, offered free flights for relatives to Sulawesi, the destination of Flight 574. The company did not comment on activist groups announcing lawsuits in case Adam Air would not assume full responsibility. Mandala Airlines' only noteworthy reaction within this time span was its handling and financing of the cleanup efforts on the site of the crash.

After that first week, but within the first month (*phase 3*) of the crashes, Adam Air agreed to provide monetary compensation. This was confirmed later, i.e. over two weeks after the accident, in the first public statement by Adam Air's president, who attempted to justify his timing by pointing to his involvement in the search efforts. He also emphasized that there had been no cost-cutting in security procedures and no orders for pilots to ignore weather forecasts. Mandala Airline's restitution practices, although having been initiated more quickly, were criticized, prompting an extension to cover treatment costs for the survivors as well as rebuilding the destroyed houses. When a Mandala pilot was arrested for illegal drug use, his employer announced his termination and company-wide drug tests. Three-and-a-half week after the crash, reconstruction in Medan began.

One month after Flight 574 disappeared (*phase 4*), Adam Air held a funeral service near the estimated site of the crash. Adam Air management agreed to build a memorial and repeatedly promised to pay restitution. When Adam Air planes were later grounded after another incident, the company attributed it to strong winds and expressed a lack of understanding for the punishment. Finally, almost eight months after the crash, Adam Air hired a ship to recover the missing black box. Mandala Airlines, on the other hand, started paying compensation about seven weeks after the accident involving Flight 091, along with the announcement that this would be considered the concluding step in the affair.

When comparing the two cases across phases of the crises, two main differences in reactions stand out. First, Mandala Airline's reactions occurred mostly in phases 1 and 2, while Adam Air's activities were spread out more evenly over the duration of their crisis. The highest level of reactions for Mandala could be observed within days of the crash, whereas Adam Air took over a week to notably address the situation. Second, Mandala almost exclusively chose conformant tactics in response to the crisis. The only reactions falling outside the appreciative and accommodative categories occurred immediately after the crash. By contrast, Adam Air employed a combination of mainly defensive and accommodative strategies throughout the course of its crisis. In sum, Mandala reacted considerably more swiftly, decisively, and con-

sistently than its competitor. As noted above, Mandala was much more successful in overcoming the loss of Flight 091 as was Adam Air, which ultimately lost its license.

Scandals

Comparing the two scandals surrounding the practices of spying on employees at Lidl and Deutsche Telekom revealed more commonalities as was true for the two accidents. Again, both companies refrained from using evasive tactics in response to the accusations, acknowledging the existence of problems. Lidl and Telekom also exhibited a similar total number of reactions, of which most were symbolic, i.e. non-accommodative. Still, there were different emphases in terms of the temporal structure and combination of crisis reactions, which will now be described phase-wise. Examples thereof are presented in Table 6.

On the day that problematic practices at Lidl were reported by a news magazine (*phase 1*), a senior executive admitted to the existence of surveillance records, but attempted to excuse this by framing them as a theft prevention program. When a workers' union publicly encouraged lawsuits against the company, Lidl referred to the spying activities as the work of a few overeager detectives acting without knowledge of the Lidl management. It was also announced that business relationships with those detectives had been terminated. In a letter to all employees, Lidl apologized for potentially breaching their privacy. Management further explained that there had been some intensive surveillance in the course of inventory taking. By contrast, the scandal involving Deutsche Telekom was publicized by the company itself, along with the assertion that all efforts to elucidate the affair would be supported. Telekom's CEO also conceded weaknesses in the company's security procedures. After official investigations were initiated, the CEO reaffirmed that Telekom would be very active in the resolution of the matter.

The remainder of the first week of the respective scandals (*phase 2*) passed relatively quietly in both cases. Lidl publicly apologized in a newspaper article, announcing closer cooperation with their workforce in the future. While detectives' associations complained about being blamed for the irregularities and official investigation were underway, Lidl offered their employees access to data records containing information about them. With respect to the Telekom case, a spokesperson defended the ten-day lapse between the self-report to the police and the public announcement as necessary for thorough internal investigations.

Within the following three weeks (*phase 3*), Lidl reacted to warnings by consumer protection organizations not to use debit cards at Lidl stores by assuring customers that video surveillance data was deleted daily. In addition, the company began removing all video cameras

Table 6. Reactions to scandals over time by example.

	Phase 1	Phase 2	Phase 3	Phase 4
Evasive				
Defensive	<i>Lidl:</i> “accusations have made us concerned”; “single cases of overeager detectives”; “nothing unusual in retailing”.		<i>Telekom:</i> “There was no recording; it was merely necessary to discover hacker code”.	
Appreciative	<i>Lidl:</i> regret for the affair. <i>Telekom:</i> “We alerted public prosecution and will support all efforts for complete clarification”; “discernible weaknesses” in security; “customer data are safe”.	<i>Lidl:</i> “We are concerned”; “we did not want this to happen.” <i>Telekom:</i> “Unhurried investigations would have been impossible otherwise”.	<i>Lidl:</i> “We will continue to elucidate and openly inform”; “PIN might be recorded”; “video tapes are deleted daily”; “I have to blame myself for a lack of control”; ad campaign: “We trust Lidl – Trust Us”. <i>Telekom:</i> CEO meets Minister of the Interior; “data security of the highest priority”; “misuse is not a trivial offense”	<i>Telekom:</i> “Apologize in the company’s name”; “for improper use of connection data”.
Accommodative	<i>Lidl:</i> “cooperation with the detectives was terminated, since their approach cannot be reconciled with our understanding of treating employees fairly”.		<i>Lidl:</i> Cameras are removed; security systems “fundamentally reformed”; “thank-you payment”; “proud of employees for standing by the company”. <i>Telekom:</i> “It’s now about preventing future criminal misuse”.	<i>Lidl:</i> “Special training for detectives”; “so that everybody knows what they’re dealing with”. <i>Telekom:</i> “First important piece” for ensuring better data security; creation of top executive and council for data security.

from stores and developing an entirely new security system. When first signs of boycotts became apparent, apologies and assurances of changes in treating employees were repeated. In addition, every employee staying with Lidl despite the scandal received a one-time bonus payment, followed by a media campaign asking customers to end the boycott. On behalf of Deutsche Telekom, the CEO met with the Minister of the Interior in order to provide information on the spying incidents. He later announced that the company had enlisted well-known experts for the reorganization of corporate security. Rumors about a third of Telekom’s cus-

customer base wanting to change providers were countered by declaring that data security was of the highest priority. In response to new accusations of recording customer phone calls, Telekom explained that there were no recordings, but that some attacks by computer hackers had to be detected.

In the case of Lidl, the scandal had almost subsided after one month (*phase 4*). A large market research firm reported that Lidl's losses in market share were smaller than estimated. Stores were equipped with new security cameras and detectives. However, it was emphasized that, under the new security rules, employees and customers would be informed about the surveillance. In the end, Lidl was fined 1.5 million Euros. The last phase of the Telekom scandal saw an announcement by the CEO that he would apologize to all further persons concerned. He subsequently apologized to the workers' council as well as the board of directors. A new top executive job for data security was created and access to sensitive data was restricted.

Overall, the two scandals appear to be very similar, especially since both companies coped with them more or less successfully. There are, however, subtle differences: Lidl reacted more strongly right after its misconduct became public, while Telekom's reactions were steadier and more evenly distributed over time. Lidl relied on defensive tactics to a greater extent than did Telekom, which in turn reacted almost exclusively by explaining and apologizing. This is particularly true for phase 1 of the scandals. On the other hand, Telekom did not move to significant accommodative activities until very late in the progressing crisis. In other words, Lidl went from strong defense to quick acceptance of responsibility, while Telekom was more conformant from the beginning, but reacted more slowly. It may thus be concluded that temporal and qualitative aspects of the respective reactions balanced each other. This is in concordance with the outcomes of the crises. While it may be argued that Lidl suffered somewhat more due to customer boycotts, both companies remained largely unharmed.

Product safety and health incidents

Comparing the two incidents involving producers of powdered milk lead to a relatively clear picture of their differing reactions, be it in terms of temporal structure or combination of reaction types. There were, however, a few commonalities. As was found in the other four cases none of the companies engaged in evasive behaviors. In addition, both organizations displayed the same total number of reactions, allowing for easier comparison. Again, these reactions will now be described in more detail, while examples are listed in Table 7.

One day after the media reported on over 400 children suffering from poisoned milk powder (*phase 1*), Sanlu Group publicly confirmed that their product was severely contaminated with

Table 7. Reactions to product safety and health incidents over time by example.

	Phase 1	Phase 2	Phase 3	Phase 4
Evasive				
Defensive	<i>Sanlu:</i> No announcement due to retailers refusing to remit products.	<i>Sanlu:</i> Fraudulent suppliers are blamed for the problems. <i>Mengniu:</i> CFO claims that contaminated milk came from small suppliers.		
Appreciative	<i>Sanlu:</i> admits to melamine in Sanlu products; “We finally imported foreign equipment in August [...] and found the milk powder contained Melamine”. <i>Mengniu:</i> “The situation is extremely distressing [...] important we get to the bottom of the problem [...] we’re doing everything [...]”.	<i>Sanlu:</i> Vice President apologizes for the incident; confirmation of selling hazardous products for half a year; confession to products still being on the market.		<i>Mengniu:</i> “we are very sorry to have caused harm [...] offer sincere apologies and plea for forgiveness [...] we welcome supervision from all walks of society.”
Accommodative	<i>Sanlu:</i> Recall of affected products. <i>Mengniu:</i> Announcement of payments twice the mandated amount; recall of all products; CEO offered to resign	<i>Sanlu:</i> Director General fired.	<i>Mengniu:</i> New testing procedures announced; future focus on large suppliers announced.	<i>Mengniu:</i> Dairy industry established aid fund.

melamine. Sanlu also initiated a large-scale recall in order to pull several hundred tons of milk powder from the value chain. When speculations arose whether Sanlu had already known about such problems since August – possibly March – of that year, a statement was issued explaining that there had been indications, but that Sanlu had not until recently gained access to more sophisticated foreign tests. However, it remained unclear if and when Sanlu had informed authorities. According to Sanlu, they had refrained from a public warning because large retailers had refused to remit affected products. In the course of the melamine crisis, products of Mengniu Dairy Corporation were also found to be contaminated. On the same day, Mengniu issued a statement apologizing for the incident and announcing to pay twice the

state-mandated amount of compensation to victims of affected products. Mengniu then recalled all of its products from retailers, and the CEO offered to resign his post.

The following days (*phase 2*) saw Sanlu under intense criticism. The company refused to explain how the melamine could end up in the powdered milk and blamed fraudulent suppliers as the true perpetrators. Yet, Sanlu's Vice President publicly apologized for the incident. When the number of victims continued to rise, Sanlu admitted to having been selling contaminated milk powder for at least half a year. The Director General of Sanlu was fired and arrested shortly after. The company then conceded that there were still hazardous products on retailer shelves. At Mengniu, the Chief Financial Officer apologized while emphasizing that only a small portion of the company's product contained melamine. Regardless, the government revoked its seal of quality for Mengniu milk powder.

After the first week following the public uncovering of the health issues (*phases 3 and 4*), control over the situation had largely been taken out of Sanlu's hands. The company was placed under oversight by the Chinese government and thus practically barred from issuing any more statements. Sanlu Group later filed for bankruptcy and was dissolved. Mengniu, being less affected by the strict government intervention, later announced the introduction of new testing procedures and techniques for dairy production. Finally, the remaining members of the Chinese dairy industry, including Mengniu, established an aid fund for the victims.

Overall, reactions exhibited by Sanlu were more diverse than those by Mengniu. Sanlu employed more defensive and appreciative tactics, while Mengniu relied almost exclusively on accommodation. Moreover, Mengniu's reactions were spread over several months, whereas Sanlu ceased communication with the public after one week. It should be noted, however, that this may have been due to government influence, which was much less strict for Mengniu. More generally, this case pair differs from the others in this study in that both organizations were part of the same crisis. On one hand, this serves as an additional "control" from a methodical perspective, making the comparison more interesting. On the other hand, the crisis involved Sanlu from the very start and spread to other companies, including Mengniu, later. Mengniu therefore had more time to prepare in addition to not being portrayed as the primary perpetrator.

Conclusions from Study 2

In sum, there were considerable differences in reaction patterns within case pairs, particularly for accidents and products safety incidents. As for the classes of reactions, the distribution of

tactics followed the rule: the more conformant the more often. Accommodative reactions were most common, followed closely by the appreciative, and, at an interval, the defensive. Most strikingly, there was no evidence for evasive behavior in any of the cases. There are (at least) two possible explanations for this finding. First, the organizations involved may have refrained from retreat, concealment or denial because it was too late. Evasive reactions may be ineffective once the existence of a crisis has become obvious (Breitsohl 2009; Elsbach 2001). Second, since the analysis for Study 2 was based on media reports, it is possible that some of the organizations did use evasive tactics successfully in that the media simply did not notice the existing problems. This may be true, for example, in the Deutsche Telekom case. Before informing the public about the spying practices, the company had calmly conducted internal investigations.

This may have been instrumental in overcoming the crisis without significant harm. It should be noted, however, that a comparison of the two scandals in terms of efficacy of reaction classes turned out to be difficult. Both Telekom and Lidl relied mostly on appreciative, some accommodative and a few defensive reactions. Yet, this does support earlier propositions that appreciative and accommodative tactics should be more effective in scandals (Breitsohl 2009). With regards to the two product safety incidents, additional support for those propositions was found since the accommodative reactions exhibited by Mengniu proved more successful than the defensive behavior by Sanlu. As noted before, however, Mengniu did have the benefit of being able to learn from Sanlu's mistakes made in the very same crisis. On a more general level, "second-reactors" may often be in an advantageous position because the first company affected by an industry-wide crisis has to take a major part of the blame. For the two accidents, accommodative signals sent by Mandala Airlines were more effective than the defensive strategy pursued by Adam Air. While this does not provide support for Breitsohl's (2009) suggestion of displaying rational, neutral reactions, it is congruent with results reported by Marcus and Goodman (1991).

As for the four time phases into which the case histories were divided, two overall patterns in organizational crisis reactions emerged. Across reaction classes, phases 1 and 3 contained significantly higher activity than phases 2 and 4. It appears that, generally, an initial wave of reactions was followed by periods of waiting for public reactions before another wave of reactions was issued. This would back up the conceptualization of organizational crises as discourses consisting of organizational action and stakeholder feedback (Pfarrer et al. 2008). Between reaction classes, there was a clear shift from more resistant to more conformant tactics over time. More specifically, defensive reactions quickly subsided after a few days following

the threatening event and remained at a very low level. Appreciative and accommodative reactions exhibited the wave pattern described above. In terms of efficacy, reacting swiftly proved more successful for accidents and scandals, taking into account unreported evasive tactics by Deutsche Telekom. This supports earlier findings concerning the importance of timing in crisis management (Breitsohl 2008).

Discussion

The goal of the studies summarized in this paper was to gain insights into the course of organizational crises in order to identify candidate relationships between crisis types, dimensions of legitimacy, and organizational reactions. To this end, two qualitative comparative case studies were conducted, for which large volumes of media reports on crises were analyzed. Most generally, support was found for the relevance of legitimacy in the context of organizational crises. As Study 1 showed, three out of four dimensions drawn from the literature on legitimacy were affected by threatening events, while the fourth may have been excluded due to methodological biases. Furthermore, deductively gained propositions by Breitsohl (2009) on relationships between crisis types and dimensions of legitimacy were largely supported by Study 1. This was particularly true for scandals, where moral and regulative legitimacy were primarily impacted. Partial support was found in that product safety and health incidents reduced regulative legitimacy. Lack of support in cases of accidents may be due to idiosyncrasies. Study 2 brought additional support for earlier work (Breitsohl 2008, 2009). Specifically, beyond reinforcing a stakeholder perspective on crises, results show that timing of crisis management measures played an important role in effectively handling both accidents and scandals. In terms of reactions classes, scandals and products safety incidents followed the pattern posited by Breitsohl (2009). Specifically, conformant tactics proved successful in overcoming scandals.

Despite these valuable insights, there are some limitations to consider, pertaining mainly to the use of media reports as data source as well as comparative qualitative case studies as a research design. First, Study 1 comprised nine highly diverse cases, yet none of the reports on any of the cases provided a basis for assessing an effect on pragmatic legitimacy. This was explained above by a possible irrelevance of pragmatic evaluative aspects to journalists. It is beyond the scope of this paper to investigate this explanation. Still, the scarcity of data on pragmatic legitimacy points to a limitation of media analysis as an indicator for public opinion. Moreover, media reports not only reflect, but also shape the public opinion about an organization (Dowling/Pfeffer 1975). This is also true for reports on organizational crises. As

Nelkin (1988) pointed out, the media “serve as filters through which the public receives news and interpretations of accidents” (p. 341). In this process, norms and expectations of the journalists reporting the news play an important role. Thus, although very useful, media reports are not a perfect measure of organizational legitimacy.

Second, by their very definition, organizational crises are rare events. This, in combination with the extant diversity of organizations, even within a particular industry, should render individual crises very dissimilar to each other, making comparative studies even more difficult. Indeed, the cases presented in Study 2, although purposely selected to be similar, exhibited numerous idiosyncrasies limiting comparison. For instance, prior to the spying scandal, Lidl had been suffering from reports on poor personnel management practices. Deutsche Telekom, on the other hand, has a notoriously poor image among the German population because, being a former state-owned monopolist, it faced great challenges in improving customer service. It remains unclear whether these individual histories affected the course of the scandals. Similar limitations can be found for Study 1. For example, the company operating the ill-fated passenger train was largely owned by the state. This ownership structure may provide a different legitimacy basis compared to private companies. Moreover, industries employing high-risk technologies are often highly-regulated, making the organizations difficult to compare. In sum, while single-case studies of crises have provided great insights (e.g. Vaughan 1990; Weick 1990, 1993), this research design appears to exhibit more limitations for exploring relationships from a stakeholder perspective.

While the results presented in this paper point to the importance of studying organizational crises from a legitimacy perspective, as well as shedding light on the possible role of legitimacy in the resolution of crises, there is still room for further research. One goal could be to overcome the limitations of case studies outlined above in order to achieve higher levels of generalization. This may require researchers to abstract away from single real-world cases and focus on archetypes of crises, although those may be difficult to delineate. Furthermore, since measuring organizational legitimacy through media reports has considerable yet limited value, more direct approaches could contribute greatly to understanding perceptions of legitimacy.

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