Frame Competition After Key Events: A Longitudinal Study of Media Framing of Economic Policy After the Lehman Brothers Bankruptcy 2008–2009

Stefan Geiß[1], Mathias Weber[1], and Oliver Quiring[1]

Department of Communication, Johannes Gutenberg, University of Mainz, Mainz, Germany

Abstract

Key events catalyze frame-building processes and competition between frames. A longitudinal study (54 weeks) analyzes framing of economic policy after the bankruptcy of Lehman Brothers (2008–2009) in German media to investigate the dynamics of frame struggles. As hypothesized, status and resources of frame sponsors and cultural resonance of frames proved critical for a frame's success. The frames ranking high on these criteria were more competitive and had the capability to displace and suppress alternative frames. The same set of seven frames dominated media coverage more or less unchanged, and competed coequally. Overall, media framing evolution was highly inert. The key event did not catalyze a change of interpretive paradigms, but intensified the frame contest between established frames.

In September 2008, the bankruptcy of Lehman Brothers triggered an international recession by turning a latent mortgage crisis in the United States into a manifest financial crisis at global level. In the wake of the crisis, media coverage of the economy intensified and discussions about economic policy accelerated in search of apt responses to the threat posed by the crisis. The crisis struck hard in Germany—a major economic player in the European Union and in world trade—climaxing in 2009 with the steepest decline of the gross domestic product since 1945 (−5.6%).

In such a situation, society faces a crossroads: Decisions are to be made regarding fundamental aspects of economic policy—with far-reaching

All correspondence concerning this article should be addressed to Stefan Geiß, Department of Communication, University of Mainz, Jakob-Welder-Weg 12, 55099 Mainz, Germany. E-mail: stefan.geiss@uni-mainz.de

consequences for economic protagonists. Those who manage to bring their point-of-view into public consciousness and mobilize public support may benefit from the crisis, as changes in policy may be in their interest. Those who remain silent, who do not receive the necessary public attention, or who fail to mobilize public support, are likely to be negatively affected by the crisis in short term as well as in the long run: Their interests are neglected, delegitimized, and marginalized in the public arena. This pressure induces increased competition for public attention and support. As a result, different actors try to establish frames that imply policy measures in their favor. As neither the economic situation nor the feasibility of countermeasures can be objectively determined, but depend on how economic processes are construed, they are subject to frame competition (Matthes, 2012). It is most likely that policymakers in Germany intensively followed the coverage of the mass media and were themselves influenced by the media's framing of the crisis, be it that they themselves adapted frames from the media or that they speculated how the media's framing may influence the general population (Baumgartner, De Boef, & Boydstun, 2008; Kepplinger, 2007). In turn, these media effects on economic policies affected economic developments in Germany, in Europe, and around the world.

There are long-term studies of frame dynamics that track changes in media framing year by year (Baumgartner et al., 2008; Nisbet, Brossard, & Kroepsch, 2003; Nisbet & Huge, 2006). The actual contest and competition unfolds in shorter time spans, however. As the topic and tone of media coverage changes at rather short intervals, this is the rhythm we should likewise consider when analyzing frame contests. There are few frame-building studies with a higher temporal resolution (Brosius & Eps, 1995; Scheufele, 2006), but they all focus on the issue of xenophobia, and they deemphasize the role of frame sponsors (Carragee & Roefs, 2004); furthermore, they neglect the contest and competition between frames over time. These deficits pose significant research gaps.

As a step forward in closing these research gaps, the current study seeks to identify how the strength of frames develops over time and how frames relate to and compete with one another for media attention. Furthermore, we attempt to establish a link between the features and the competitiveness of a frame. To achieve these goals, we collected content analysis data of frame competition in various news media—newspapers, weekly magazines, and television (TV) news—in Germany in the year from the bankruptcy of Lehman Brothers (September 15, 2008) until the German general elections (September 27, 2009). Besides being highly relevant by itself, economic coverage is ideal for studying frame competition because we can expect elite dissent and high frame diversity. We inductively identify frames in media coverage and analyze

the frame structure, its development, the patterns of competition and reinforcement between media frames, and the diversity of framing over time.

Frames and Framing

Messages in the mass media are produced and processed as a holistic story rather than as atomized information units (Valkenburg, Semetko, & de Vreese, 1999). The storylines are called media frames (Gamson & Modigliani, 1989). Recipients use media frames as a guideline for processing and interpreting information. Entman (1993) views frames as those elements in the text that put a certain way of thinking about an issue into the foreground and push alternative ways of thinking into the background. Framing may occur strategically and consciously or may result from near-automatic recursion on cultural backgrounds (Entman, 1993).

Potentially, each news story can be framed in various ways. The same information may be interpreted differently because it is framed differently (Valkenburg et al., 1999). In reality, however, different journalists and media will often rely on similar frames because they are provided by opinion leader media, public relations, or news agencies, because they fit the current situation, reflect shared cultural backgrounds, make sense, and are appealing to the audience (Entman, 2003). Consensual and repeated use of one or few media frames has important consequences for public communication and opinion formation: Journalists use the frames as guidelines for gathering, selecting, and presenting information (Brosius & Eps, 1995); then, recipients use these cues for processing and storing information, for forming opinions (Lecheler & de Vreese, 2011) and expectations, and making inferences that often go beyond the actual media content, elaborating on its meta-message (Iyengar, 1991; Kepplinger, Geiß, & Siebert, 2012). Thereby, framing effects transcend the individual level and impact society as a whole by shaping the paths along which large shares of the population think about particular issues and what ways of thinking appear legitimate. The question is how diverse the scope of frames about a particular issue is (Entman, 2003), where the frames come from, what they imply, and whether the scope of frames becomes narrower or wider over time. More homogeneous framing would increase the potential for media effects by impeding selective use. This offers opportunities for manipulation of (public) opinion (Bennett, Lawrence, & Livingston, 2007; Entman, 2003).

Frame Competition

Framing an issue in a particular way is often a strategic decision of a social actor. Actors compete for public display of viewpoints and public approval

by the mass media and the audience. They stress information that strengthens their own stance or weakens the opponent's stance (Entman, 2003)—that is they engage in frame building (Hänggli, 2012) and frame alignment (Benford & Snow, 2000). The dynamics of competitive frame building will lead to a changing landscape of frames. Over time, a dynamical equilibrium will emerge. However, situational changes always threaten to shock the equilibrium out of balance, catalyzing change and the transition to a new balance of power between frame sponsors (e.g., Kepplinger & Habermeier, 1995; Ross & Bantimaroudin, 2006). This study is set in the context of such a catalytic key event: the bankruptcy of Lehman Brothers in September 2008. Doubtlessly, this event fueled the fire (and changed the course) of debate about economic issues and government interventions. But who prevails in such frame contests and why? Research suggests that there are three major sources of frame-building success or failure: (1) external influences (e.g., prominent events), (2) the status of frame sponsors and promoters, and (3) linking the frame sponsor's self-interested positions with culturally resonant ideas.

External Influences and Key Events

Framing refers to perceptions or depictions of reality which are social constructions to some degree. Still, frames must change in response to external shocks to retain or generate a fit between the frame and current observations of the situation (Scheufele, 2006). Usually, the framing of an issue changes slowly and gradually (Scheufele, 2006). However, so-called key events have the capability not only to push an issue on the agenda (Kepplinger & Habermeier, 1995) but also to trigger, accelerate, and amplify changes in the framing of the issue at hand (Brosius & Eps, 1995). Key events motivate frame sponsors to engage in frame contests; thereby, they enhance competition in the frame-building process. In earlier studies (e.g., Scheufele, 2006), the key event shaped news selection and led to one dominant frame at a time with low frame competition. This is most likely a result of elite consensus and high cultural resonance of the dominant frame (Bennett et al., 2007; Entman, 2003). In the context of coverage of economic policy following key events, elite dissent (e.g., between banks, industry, labor unions, and government) as well as the availability of various culturally resonant ideologies (liberalism and socialism) will most likely lead to more controversial frame-building processes. *H1: Economic key events stimulate a frame contest with various competitive frames: No frame will dominate the debate, and competing frames will remain prevalent throughout the frame contest.*

Status of Frame Sponsors

The chances and means of frame sponsors to successfully disseminate a frame via the mass media are unequally distributed in society. Which frame prevails largely depends on resources and prestige (Carragee & Roefs, 2004, p. 220; Hänggli, 2012), lowering the chances of less-established actors like new social movements to successfully compete in frame building. Presence of actors in the mass media reinforces the belief that they are legitimate contributors to public debate, increasing resources and prestige. *H2: All frames present in the mass media are sponsored by resourceful and prestigious actors thematically related to the economy*. Thereby, frames in the mass media are an *indicator* of, a means to *exert*, and an instrument to *enhance* social and political power. Whether the mass media attribute status to a source depends on whether the source is associated with the issue, whether it has expertise or information, or can claim to represent the interests of important social strata (Wolfsfeld & Sheafer, 2006).

Linking Sponsor's Interests With Culturally Resonant Ideas

Self-interestedness of sponsors. Successful frame building is not only a matter of status, but frame sponsors can choose better or worse courses of action that influence whether their frame prevails, for example, by strategically bridging, amplifying, extending, or transforming frames (Benford & Snow, 2000). These are strategic choices based on interests/motivations and weighing of different options (Hänggli & Kriesi, 2012). Financial corporations would therefore ask for help for banks, and industrial corporations would ask for help for the real economy. The government's interests may vary according to the governing parties' economic ideology, but in most cases, the government would try to change and extend its instruments to regulate the economy. *H3: Frames reflect the interest structure of their sponsors*. But the "art" of framing is not to bluntly say what you want in public. It is important to impose a perspective on the discussion from which the claims appear legitimate (e.g., van Gorp, 2005, p. 68). Linking one's claims to shared cultural beliefs is a powerful means of legitimization.

    Cultural resonance of frames. A culturally resonant (Benford & Snow, 2000) or "strong" frame fits the existing cognitive structures of the audience (Chong & Druckman, 2007; Entman, 2003). The higher the congruency between the frame and the preexisting cognitive structures, the higher the share of people who will adopt the perspective suggested by the frame uncritically, and draw the conclusions implied by the frame (Kepplinger et al., 2012). Culturally resonant frames often directedly evoke affects and emotions in wide strata of the population, for example,

by appealing to widely accepted values (Chong & Druckman, 2007; Kühne, Schemer, Matthes & Wirth, 2011). Building on existing cognitive structures increases the effectiveness of the frame by facilitating comprehension and promoting message acceptance (Edy & Meirick, 2007). Furthermore, it increases the reach of the frame: Frames that reflect deep-rooted cultural beliefs have the chance to emerge as a *leitmotif* in news coverage and coin the public debate (Entman, 2003). *H4: The dominant frames in media coverage generally fit shared cultural beliefs.*

But which beliefs about the economy are culturally shared in Germany? A detailed population-representative face-to-face survey (German citizens >15 years; quota sample with weighting) of the "Institut für Demoskopie Allensbach" (IfD) (in field October 12–October 22, 2009) offers some insights. While nonprobability samples are viewed as flawed in the United States (Berinsky, 2006), the IfD relies on a strictly organized quota sampling technique, which was shown to give valid results (Noelle-Neumann and Petersen, 2005, pp. 22–27, pp. 255–276). Comparison with earlier and later surveys shows that economic beliefs of Germans were remarkably stable, and hence the beliefs identified in October 2009 most likely apply throughout the period of study (Table 1).

Germans were reluctant to challenge the market economy in general: A clear majority believes that the government interferes with the economy too much or about right, and Germans have—by majority—a good or ambiguous opinion about the economy. In the same vein, only interventions that undisputedly are part of the government's obligations (making and enforcing laws and regulations) are accepted by clear majorities.

In contrast, measures serving to "contain damage"—mainly bailouts or nationalizations of corporations—are supported by less than one third of the population. However, a majority of the population supports government bailouts under particular conditions: (a) if jobs are in danger (also in ancillary industries), (b) if corporations (in most cases, banks) are relevant for the economy as a whole, and (c) if the problems of a corporation are temporary in nature. Therefore, we categorize news stories as "resonant with cultural beliefs" if (a) the claim itself is accepted by a majority (i.e., the claims "regulate" and "launch stimulus package"), regardless of the arguments used or (b) the claim "contain damage" is supported by one or more of the following arguments: economic efficiency ("systemic relevance" of a corporation), crisis dynamics (highlighting the temporary nature of the measure), or solidarity with employees. All other claim/argument combinations are categorized as "not resonant with cultural beliefs." With this background, H4 can be assessed in the Results section.

Table 1

Views of the German Population Regarding Government Interference in the Economy

Views regarding government interference in the economy	Agreement						
	2008/ Mar	2008/ Oct	2009/ Feb	2009/ Apr	<u>2009/ Oct</u>	2011/ Nov	2012/ Feb
Support of the economic system ($N = 1,834$)	%	%	%	%	%	%	%
"The government should interfere as little as possible"	29			33	34		
"Good opinion about the [German] economic system"[a]		31			40		48
"The state interferes with the economy too little"[b]	30	37			23	37	
Legitimacy of government interventions ($N = 897$)							
"Monitor that corporations stick to laws edw001edw001and regulations"[c] → *Regulate economy*[e]				80	73	81	
"Regulate corporations' conduct, for example, with labor or tax regulations"[c] → *Regulate economy*[e]				69	67	71	
"Help corporations during crises, for example, lower taxes or stimulate growth"[c] → *Stimulus package*[e]				65	49	52	
"Save corporations with bailouts"[c]				29	26	24	
"Nationalize corporations that are in danger"[c]				20	20	23	
Conditions for bailout of corporations ($N = 897$)							
"Jobs are in danger."[d] → *Solidarity with employees*[e]			73		73		
"The bankruptcy of a corporation severely affects the economy in general."[d] → *Economic efficiency (Systemic relevance)*[e]			63		60		
"The problems are temporary, the corporation is healthy in general."[d] → *Crisis attenuation (Interventions only temporary)*[e]			66		56		
"There are large ancillary industries which depend on the corporation."[d] → *Solidarity with employees; Economic efficiency (Systemic relevance)*[e]			48		50		
"No other corporations are negatively affected by the bailout."[d]			30		30		

(continued)

Table 1
Continued

	Agreement						
Views regarding government interference in the economy	2008/ Mar	2008/ Oct	2009/ Feb	2009/ Apr	<u>2009/ Oct</u>	2011/ Nov	2012/ Feb
"It is a purely German corporation."[d]			28		26		
"The managers are not to be blamed for the crisis of the corporation."[d]			31		21		
"It is an old corporation, rich in tradition."[d]			13		16		

Note. Italicized text: enumerates claims/arguments in line (culturally resonant) with the majority opinion expressed in the respective item. All claims/arguments not identified as "high" on cultural resonance ("political arguments," "judicial arguments," "solidarity between," and "other" arguments) are rated "low" on cultural resonance.
[a]"Regarding the economic system in Germany: Do you have a good opinion about the economic system in Germany or do you have no good opinion?"
[b]"What is your take on this: Does the state interfere with the economy too much, or too little, or just right?"
[c]"How much influence should the government have in the economy? On this list you find some means of government influence. Please tell me all the things on the list about which you say: 'the government should do that."
[d]"Currently, there is much debate about under what circumstances the government should help corporations in the current crisis. What is your opinion? In which cases should the government help corporations struggling with the crisis?"
[e]"We scored this item as indicating high cultural resonance of the message italicized; they correspond to arguments coded in the content analysis. All arguments not scored high are regarded low on cultural resonance"
Source. Institut für Demoskopie Allensbach; IFD Archive No. 10028, 10030, 10033, 10036, <u>10046</u>, 10082, 10086 (all weighted), October 2009.

Competition Between Frames

The hypotheses deal with the characteristics of particular frames. The development of the frame structure and the patterns of competition between frames cannot be predicted, as the necessary marginal conditions are unknown. However, open-ended research questions are put forth to guide data analysis. *RQ1: Which frames gained and which lost in prominence in the media? RQ2: Which frames did displace, which did reinforce one another? RQ3: Did the framing become more homogenous or more heterogeneous over time?*

To answer RQ2, we draw on analyses of issue competition (Brosius & Kepplinger, 1995) and issue relationships (Geiß, 2011). These studies provide an analytical framework: Most generally, frames can take media attention away from other frames (displacement) or one frame can reinforce other frames (reinforcement). At each point in time and for each dyad of frames, we classify their relationship. In a displacement relationship, a *killer frame* (active) displaces a *victim frame* (passive). In a reinforcement relationship, a *leader frame* (active) reinforces a *follower frame* (passive). We adapt these labels from the agenda setting/building tradition, where *killer issue*, *victim issue* (Brosius &

Kepplinger, 1995), *leader issue*, and *follower issue* (Geiß, 2011) are distinguished. Which frame acts as a killer, victim, leader, or follower varies over time and between dyads. When summing across time and dyads, each frame is characterized by a particular mixture of killer and leader effects it exerts on other frames and of victim and follower effects that are exerted on it by other frames, indicative of their competitive roles. This is an ex post empirical description rather than an ex ante theoretical classification. In the Methods Section, we explain how this framework is implemented in data analysis.

We use this framework because it provides indicators of a frame's success: Frames that often act as killer and leader frames and seldom act as victim frames can be considered more successful in frame competition than those which are often displaced by other frames and lack the capability of displacing or reinforcing other frames. The same factors that influence the chance that a frame emerges in media coverage (H1 to H4) might influence how successful a frame competes in a frame contest, leading to *RQ4: How does the competitive success of frames relate to (1) the continuity of its presence in media coverage, (2) prevalence of elite sponsors, (3) positivity/negativity toward the sponsor, and (4) cultural resonance?*

Method

To identify media frames, we coded 4,177 news items for recurring elements that could be assigned to the frame dimensions of (a) problem definition, (b) causal interpretation, (c) moral evaluation, and (d) treatment recommendation (Entman, 1993) with regard to the financial crisis. Then, cluster analysis was used to inductively group articles together that featured a similar take on the issue with regard to the predefined frame elements.

Content Analysis

Design. The study is based on a content analysis of 4,177 news and opinion pieces about (actual or proposed) government interventions into the economy. Three major daily newspapers (two elite papers: *Frankfurter Allgemeine Zeitung* and *Süddeutsche Zeitung*; one tabloid: *Bild; every second edition*), two weekly news magazines (*Focus*, *Spiegel; every edition*), and five daily TV newscasts or news magazines (four public: *Tagesschau*, *Tagesthemen*, *Heute*, and *Heute Journal*; one private: *RTL aktuell; every second edition*) were analyzed. These were picked for their high reach as well as their influence within the media system in Germany.

Measures. Primarily, frames were built on which actors were portrayed to play which role in the economic crisis. Ten roles were distinguished: (1) who (may have) caused the economic problems (causal attribution)? (2) Who is or might be responsible for solving the problems (treatment recommendation)?

(3) Who is or might be adversely affected by the economic problems (moral evaluation, problem definition)? (4) Who benefits or might benefit from the crisis and its consequences (moral evaluation and problem definition)? (5) Who benefits or might benefit from the countermeasures to fight the crisis (moral evaluation and problem definition)? (6) Who is or might be adversely affected by the countermeasures to fight the crisis (moral evaluation and problem definition)? (7) Who brings forth a demand for a government intervention (treatment recommendation)? (8) Who brings forth an argument to support or reject a particular countermeasure (treatment recommendation)? (9) Who is or shall be deprived of competencies or powers (treatment recommendation)? and (10) Who received or is to receive additional competencies or powers (treatment recommendation)? In each role, up to three of the following actors could be coded: (a) financial economy; (b) real economy/industry (other); (b1) *Arcandor* (The *Arcandor AG* was a holding company which mainly operated in telephone and Internet shopping, stores, and travel agencies); (b2) *Opel/GM* [The *Adam Opel AG* is a car manufacturer and a subsidiary company of *General Motors* (GM)]. Because of the financial shortages of *GM*, *Opel* approached bankruptcy); (c) state/politics (other); (c1) government; (d) labor unions; (e) employers' associations; (f) scientists/experts; (g) journalists; and (h) others. By dichotomizing whether any class of actors (11) was portrayed in a particular role (10), $11 \times 10 = 110$ binary variables were potentially included in the analysis. Additionally, the countermeasures under discussion (seven binary codings per item: e.g., damage containment in financial economy; regulation of financial economy; economic stimulus package) and the kind of arguments put forth (six binary codings per item: e.g., economic, political, and legal arguments) were coded.

Eleven news items were coded for intercoder reliability, leading to 1,210 coding tasks for coding actor–role-constellations (Krippendorff's $\alpha = .884$; 95% confidence interval (CI) [.832; .945]; Brennan and Prediger's $\kappa = .946$; 95% CI [.935; .958]), 77 for coding countermeasures ($\alpha = .868$; 95% CI [.795; .942]; $\kappa = .947$; 95% CI [.914; .981]), and 66 for coding arguments ($\alpha = .302$; 95% CI [.184; .421]; $\kappa = .868$; 95% CI [.833; .902]). The low value for Krippendorff's α in coding the arguments results from the skewed marginal distribution. The validity of the α coefficient with skewed marginal distributions has been questioned (e.g., Zhao, Liu, & Deng, 2012); Brennan and Prediger's κ adjusts for chance agreement using the underlying scale rather than the marginal distribution, making it a good alternative in this case.

Frame Extraction

Frames were extracted from the data based on agglomerative cluster analysis. This procedure relied on the methodology used by several previous studies (Matthes & Kohring, 2008; van Gorp, 2005). It has the benefit of (1) being

less susceptible to subjective judgments of the researcher, and (2) allowing for more reliable coding (as compared with qualitative approaches) (Matthes & Kohring, 2008). More frequent and more meaningful frames should show up as frequently occurring similar constellations of interpretations of the financial crisis. In particular, 93 of 123 dichotomous variables (omitting variables with no variation) were used in the cluster analysis. Squared Euclidian distances were used. Clusters were merged based on Ward's algorithm. The progression of residual variance (and hence the elbow criterion) was ambivalent. Possible solutions were two, five, and eight clusters. From inspection of these possible solutions, we choose the more precise eight-cluster solution over the more parsimonious five- and two-cluster solutions, as these were blurring some meaningful distinctions. Discriminant analysis shows that cluster membership is best explained by the "countermeasure claim and argument" in a news item, followed by "crisis beneficiary," "crisis victim," and "sponsor of claims and arguments." Less important were "causal responsibility and solution responsibility" and "expansion and limitation of competencies/powers."

Analyzing Frame Competition

Statistically, analysis of frame competition involves filtering (based on a state-space model) of the time series of the relative importance of the frames (share of news items that use that frame) and dichotomizing them into active phases (>1 SD above the time series mean) and passive phases (all other phases). Then, eight regression models estimate the share of the eight frames in the different weeks (based on the filtered time series). The model has three components: (1) a linear trend and a sine function for periodic patterns ("time" component), (2) the (dichotomous) activity time series of the frame itself ("auto" component), and (3) the dichotomous activity time series of the other seven frames ("competition" component). While component (1) is included to control for effects of time, a comparison of the predictive power of components (2) and (3) allows assessing whether a frame's salience is more driven by its own activity ("auto" component strong, and "competition" component weak) or by the strength or weakness of the competing frames ("competition" component strong, and "auto" component weak). This procedure effectively reduced or removed autocorrelation such that a lagged dependent variable was not included in the models; autocorrelation was not significant in five of eight models and significantly weakened in the other three.

Competition analysis is based on the regression coefficients (not the tests of significance; hence, the remaining autocorrelation is not a serious problem), showing how frames compete with or relate to one another: Positive coefficients indicate that the criterion frame (follower) is reinforced by the predictor frame (leader). Negative coefficients indicate that the criterion frame (victim)

is displaced by the predictor frame (killer). Each coefficient expresses how the share of the criterion frame changes once the predictor frame turns active. To obtain killer and leader scores (active) of a frame, the positive and negative effects of that frame (as independent variable) on the seven other frames (dependent variables) are summed separately. The sum of positive coefficients is the raw leader score of that frame (i.e., its reinforcing effect on other frames), whereas the sum of the negative coefficients is the raw killer score of that frame (i.e., its displacing effect on other frames). This procedure is repeated for each frame such that we obtain eight killer and eight leader scores. To obtain victim and follower scores (passive) of a frame, the positive and negative effects of the seven other frames (active) on that frame (as dependent variable) are summed separately. The sum of positive coefficients is the raw follower score, indicating how strongly the frame is reinforced by other frames. The sum of negative coefficients is the raw victim score, indicating how strongly the frame is displaced by other frames.

The raw scores were z-standardized, using the mean and SD across the eight frames. These four scores per issue were condensed into two scores: The Reinforcement–Displacement score (RDS) is given by (a) the maximum value of both reinforcement scores (leader, follower) minus (b) the maximum value of both displacement scores (killer, victim). The Activity–Passivity score (APS) is given by (a) the maximum value of both active scores (killer, leader) minus (b) the maximum value of both passive scores (victim, follower). Finally, we computed a frame success score (FSS), which is given by: killer score plus leader score minus victim score.

The results will be inspected when answering RQ1 and RQ2 and RQ4.

Findings

Frame Structure

Frame content and stability. Eight frames were identified. Based on the claim that news stories contain, they can be referred to as "Bailout *Opel*," "Bailout the Banks," "Bailout the Industry," "Boost the Economy," "Tame the Economy," "Let the Government Fix It," and "Disempower the Banks" frames. The three "Bailout" frames called for government interventions to save particular economic branches or corporations; the "Boost the Economy" frame treated attempts to solve the crisis by providing general economic stimulus packages. The "Tame the Economy" frame dealt with regulatory measures that were mostly designed to prevent similar crises in the future. The "Let the Government Fix It" frame viewed the governments' crisis management with a strong emphasis on bailouts of corporations. The "Disempower the Banks" frame blamed the banks for the crisis and put forth measures that would make banks less powerful. The remaining

Table 2
Characteristic Frame Components of the Eight Frames

Frame component	Bailout Opel! (n = 322)	Bailout the Banks! (n = 782)	Bailout the Industry! (n = 369)	Boost the Economy! (n = 699)	Tame the Economy! (n = 493)	Let the Government Fix It! (n = 181)	Disempower the Banks! (n = 341)	Mixed (n = 990)
Sponsor of claim	**Opel**	FE	**RE**	–	Pol	Gov	**Gov**, J FE, Pol, Gov	Gov, J FE, Pol, Pol, Arc
Causation	–	FE	–	–	–	FE	FE	–
Responsibility	Pol	–	–	–	–	Gov	FE, Pol, Gov	–
Victims (crisis)	**Opel**	**FE**	**RE**	**RE**, Pol	–	–	**FE**	Arcr
Profiteer (countermeasures)	**Opel**	**FE**	**RE**	–	–	**RE**	**FE**	Arcr
Supplier of arguments	Gov	–	**J**, RE	Sc	–	Gov	**J**, **Pol**, FE	–
Expansion of powers	–	–	–	–	–	–	Pol	–
Curtailing of powers	–	–	–	–	–	FE	FE	–
Principal claim	Contain damage (RE)	Contain damage (FE)	Contain damage (RE)	Stimulus package	Regulate (RE,FE)	Contain damage (RE,FE)	Regulate (FE)	Contain damage (RE)
Principal argument	Economic political	–	Solidarity	–	–	Crisis[a]	Economic	–

Note. Entries are actors, claims, and arguments in the nonlowest variance group (Scheffé post hoc tests) and >2% visibility in that particular role (**bold**: visibility > 20%). FE = financial economy; RE = real economy; Opel = Opel; Arc = Arcandor; Pol = Politics; Gov = Federal government; J = Journalists; Sc = Scientists; –: none/not available.
[a]also: economic, solidarity.

Table 3
Continuity (H_1), Sponsor's Status (H_2), Sponsor's Evaluation (H_3), and Cultural Resonance (H_4) of Frames

Indicators	Bailout Opel! (n = 322)	Bailout the Banks! (n = 782)	Bailout the Industry! (n = 369)	Boost the Economy! (n = 699)	Tame the Economy! (n = 493)	Let the Government Fix It! (n = 181)	Disempower the Banks! (n = 341)	Mixed Frames (n = 990)
Continuity: Starting weeks of the 12-week time intervals when the frame is absent (H_1)[a]	1–10	–	–	–	–	–	–	–
Elite sponsor: Share of news stories naming elite sponsors (H_2)[b]	.57***	.33***	.43***	.28***	.44***	1.00***	.74***	.48***
Positivity: Role positivity of main sponsor (H_3)[c]	[.52;.63] +1.21***	[.30;.36] +.66***	[.40;.47] +.76***	[.24;.33] –	[.40;.49] +.04**	[1.0;1.0] +.11***	[.69;.78] +.05***	[.45;.52] +.11***
Cultural resonance: Surplus of high over low resonance arguments (H_4)[d]	–.03	+.13 ***	+.11 ***	+.93 ***	+.78 ***	+.75 ***	+.15 **	+.21 ***
Overall frame potential score[e]	–1.86	–.64	–.58	+.48	+.63	+1.38	+.48	+.10

Note. FE = financial economy; RE = real economy; Opel = Opel; Arc = Arcandor; Pol = Politics; Gov = Federal government; J = Journalists; Sc = Scientists; -: none/ not available.

[a] For all 12-week time periods (47 per frame), the alternative hypothesis that the frame prevalence is >0 (one sample t-tests) was tested. Table entries are the starting weeks of the periods for which the null hypothesis was not rejected at $p < .01$.

[b] Share of news items with elite sponsors: FE, RE, Arc, Opel, Pol, Gov, Labor Unions, and Employer's Associations; one sample t-tests test the null hypothesis that the mean number of elite sponsors =0; 95% confidence intervals in square brackets.

[c] Role positivity = surplus of positive roles over negative roles attributed to the primary frame sponsor (for the eight frames: (1) Opel, (2) FE, (3) RE, (4) –, (5) Pol, (6) Gov, (7) Gov, and (8) Arc). Positive roles: victim, profiteer (only FE, RE, Opel, Arc), responsibility (only Pol, Gov). Negative roles: causation, curtailing, responsibility (only FE, RE, Opel, Arc), profiteer (only Pol, Gov). Table entries: differences between the sponsor's role positivity in its "own" frame compared with all other frames. Welch's t-tests of the null hypothesis that the difference is ≤ 0.

[d] Claims/argument combinations used in news stories were matched with claims and arguments rated by survey respondents (see Table 1). Table entries are the average surplus of majority-accepted ("resonant") claim/argument combinations over all other claim/argument combinations ("non-resonant") per news story. One sample t-tests of the null hypothesis $M \leq 0$.

[e] Frame potential score is based on Continuity, Elite sponsorship, Positivity (reversed), and Cultural resonance and is explained in text.

#$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

"Mixed" frame subsumes news items with diverse frames that did not reverberate in the medial echo chamber, at least not to a substantial degree compared with the other frames; mostly, they called for a bailout for some corporation or branch of industry. So the residual cluster is meaningful in this context: It packages those frames that were not successful in participating in the frame contest as an individual frame—they were a residual category even for journalists. Obviously, the crisis was discussed from several perspectives that competed with one another for space in the public spotlight (Table 2). Except for the "Bailout *Opel*" frame's delayed start, no frame disappeared from the media debate in any 12-week interval (Table 3, H1)—so if they disappeared, they did so for a limited period of time. This supports H1, as a diverse set of frames was visible throughout the period of study.

Sponsors' resources. All frames are put forth by resourceful, prestigious, or expert social elites, that is, the financial economy, the real economy (industry), the top (oppositional or nongovernment) politicians, and the Federal government. None lacked a clear-cut elite frame sponsor. *Opel* was successful in establishing a particular perspective that focused on this company alone by incentivating prestigious government actors to cosponsor this frame; the comparable case of *Arcandor* did not result in the establishment of an independent frame, but is subsumed in the "mixed" category (Table 2). The share of news items that name at least one elite sponsor (see Table 3 for details) is significantly above zero in all frames, but the relative frequency ranges from 0.28 ("Boost the Economy") to 1.00 ("Let the Government Fix It"), indicating different degrees of elite centeredness (Table 3, H2). High status appears to be a necessary but not sufficient condition for establishing a frame. This supports H2.

Sponsors' interests. The frames clearly reflect the interest structure of their sponsors. For example, automobile manufacturer *Opel* sponsored a frame that claimed that *Opel* was a victim of the crisis and *Opel* should be supported to save jobs ("Bailout *Opel*!"). Similarly, banks argued they are victims of the crisis and should be supported to contain the damage of the crisis ("Bailout the Banks!"). To put the hypothesis to a formal test, we compared how often the various frame sponsors were portrayed in positive and negative roles. The surplus of positive over negative roles per news story was used as an index of valence toward the sponsor. We expected that sponsors would be portrayed more favorably in stories with frames they sponsored themselves than in stories with other frames. This was the case, but to varying degrees: The three "Bailout" frames were strongly self-interested, while the other frames were mildly self-interested (Table 3, H3). One frame did not have a clearly detectable frame sponsor and hence is not included in the analysis. Overall, H3 receives support, as most frames clearly reflect interests of their sponsors.

Figure 1

Development of frames over time. Percentage of news items with the respective frame in the current week (starting September 15, 2008). Dots represent measurements (raw data), gray lines represent data filtered according to a state-space model, and black lines indicate whether the frame is scored as "active" or "inactive"
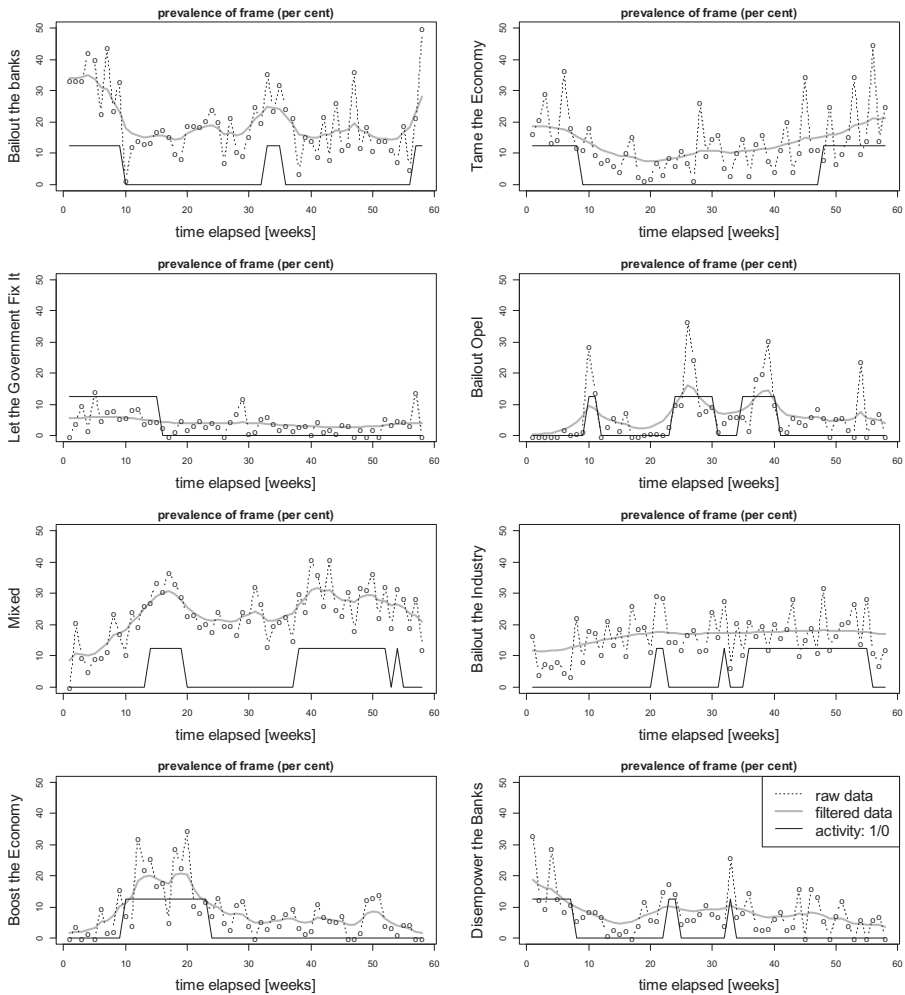
Frames' cultural resonance. To test H4, we matched the claims/arguments in the news items to the statements rated in the survey (Table 1). H4 posits that the majority of the frames we detected are in line with majority opinions, that is, are culturally resonant.

The emerging frames heavily drew on opinions toward the economy accepted by a majority of the German population. One thousand nine hundred seventy-eight news items contained culturally resonant claim/argument combinations and 686 contained nonresonant claim/argument combinations; one

Table 4
Influences on Prevalence of Frames

Regression analysis	Bailout Opel	Bailout the Banks	Bailout real econ.	Boost the economy	Tame the Economy	Let the Government fix it	Disempower Banks	Mixed
	Unstandardized regression weights							
(Intercept)	+.073***	+.224***	+.142***	+.093***	+.105***	+.053***	+.123***	+.187***
Linear function (t)	+.000	−.002***	+.001***	−.001*	+.000	−.000***	−.001***	+.002***
Sine function (t)	+.007*	−.010*	+.003	+.004	−.005	+.002	−.002	+.001
Auto (11–22)[a]	+.058***	+.049***	+.015***	+.096***	+.048***	+.020***	+.035***	+.043***
Opel (14)[a]	—	−.017	−.006	+.000	−.009	−.001	−.014#	−.010
Banks (11)[a]	−.018#	—	−.011#	−.012	+.009	+.004	−.012	−.009
Ind'ry (16)[a]	−.011#	−.005	—	+.004	−.002	−.001	+.001	−.002
Boost (14)[a]	−.025*	−.041**	+.021**	—	−.039***	−.004	−.038***	+.030**
Tame (16)[a]	−.022**	+.020#	−.016***	−.004	—	+.002	+.007	−.034***
Gov't (15)[a]	+.014#	−.009	−.019**	−.010	+.032***	—	−.020*	−.008
Disem. (17)[a]	−.017*	+.033**	−.004	−.005	−.016*	−.005*	—	−.020**
Mixed (22)[a]	−.019*	+.001	−.012*	+.008	+.002	−.010**	−.013#	—
ΔR^2_{adj} time	.009***	.172***	.366***	.212***	.034***	.444***	.055**	.345***
ΔR^2_{adj} auto	.705***	.560***	.157***	.660***	.674***	.395***	.532***	.330***
ΔR^2_{adj} competition	.137***	.094***	.366***	.009	.161***	.048**	.125**	.247***
R^2_{adj} total	.851***	.826***	.889***	.881***	.868***	.887***	.712***	.922***

(continued)

Table 4
Continued

Competition analysis	Bailout Opel	Bailout the Banks	Bailout real econ.	Boost the economy	Tame the Economy	Let the Gov't fix it	Disempower Banks	Mixed
				Raw competition scores				
Killer[b]	.058	.062	.021	.147	.077	.066	.068	.054
Leader[c]	.000	.013	.006	.051	.029	.046	.033	.011
Victim[d]	.112	.073	.068	.032	.067	.022	.097	.084
Follower[e]	.015	.055	.021	.013	.043	.006	.008	.030
				z-standardized competition scores				
Killer	−.311	−.196	−1.352	2.191	.218	−.099	−.029	−.422
Leader	−1.247	−.567	−.948	1.445	.275	1.177	.510	−.646
Victim	1.414	.109	−.035	−1.214	−.090	−1.566	.910	.472
Follower	−.534	1.775	−.168	−.635	1.079	−1.016	−.887	.386
APS[f]	−1.720	−1.970	−.913	2.826	−.804	2.190	−.400	−.894
RDS[g]	−1.950	1.670	−.133	−.746	0.861	1.280	−.400	−.086

Note. Read regression analysis table row-wise for leader/killer effect estimates (positive/negative) and column-wise for follower/victim effects estimates (positive/negative).
[a]In brackets: number of weeks categorized as "active phases."
[b]Row-wise sums of absolute values of negative B-weights of the respective frame; example for frame 1: $|-.018|+|-.009|+|-.011|+|-.012|+|-.012| = .062$.
[c]Row-wise sums of absolute values of positive B-weights of the respective frame.
[d]Column-wise sums of absolute values of negative B-weights of the respective frame.
[e]Column-wise sums of absolute values of positive B-weights of the respective frame.
[f]The activity-passivity-score (APS) is based on the higher value of standardized killer and leader scores minus the higher value of victim and follower scores, respectively.
[g]The reinforcement-displacement-score (RDS) is based on the higher value of leader and follower scores minus the higher value of killer and victim scores, respectively.
$\#p < .10$; $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$

thousand five hundred ninety-nine contained neither. The average surplus of resonant over nonresonant news stories was $+.309$ ($t(4,176) = 28.242$; $p < .001$). This surplus is also found in seven of eight frames. Only one frame had a balanced ratio of claim/argument combinations with high and low cultural resonance: the "Bailout Opel" frame (Table 3, H4). Obviously, most successful frame sponsors instrumentally incorporated culturally resonant ideas into their frames to promote their interests, which is in line with H4. That all our hypotheses were supported highlights the confirmatory nature of this part of the study. In contrast, the upcoming analyses of RQ1–4 break new ground and rest on only tentative evidence.

Frame Development

Winners and losers. In response to RQ1, the development of the intensity of the single frames over time is investigated. The salience of the eight frames changed pronouncedly over time. However, only the "Boost the economy" frame lastingly decreased in salience. This was not because the frame was unsuccessful but because the demands associated with the frame were quickly implemented: the government passed two economic stimulus packages, whereby the frame lost momentum. The "Bailout *Opel*" frame evolved cyclically with short phases of intense media attention and longer phases of absence. The "Bailout the Industry" frame was constant in strength throughout the year except the first few weeks. The other frames were present continuously, but with varying intensity (Figure 1).

Frame competition. To answer RQ2, the relationships between frames are examined. Table 4 illustrates the relationships between the frames as predicted in eight regression models (one per frame). Most frames were mainly driven by their own phases of activity versus inactivity and were affected by competing frames to a smaller degree. However, two frames were strongly influenced by the activity of competing frames ("Bailout the Industry!" and "Mixed" frames), whereas the development of the "Boost the Economy" frame was completely independent of the other frames.

Each frame can relate to the seven other frames, resulting in 56 (8×7) frame relationships under study. Twenty-seven of 56 were at least marginally statistically significant, 21 being displacement (negative) relationships, and 6 being reinforcement (positive) relationships. As expected, competitive displacement relationships were dominant, but supportive reinforcement relationships were identified as well.

Judging by the number of significant killer, leader, victim, and follower relationships, frames differed regarding the dominant roles they take in interframe relationships: some frames were relatively often taking the killer or leader role, indicative of a powerful frame. Others were often taking the victim role, indicative of a less powerful frame. To more systematically assess

what role—leader, follower, killer, victim—frames primarily take, we separately summed the (a) positive and the (b) negative effects on competing frames exerted by that frame when active (read Table 4 row-wise) and the (c) positive and the (d) negative effects on that frame exerted by competing frames (read Table 4 column-wise) to assess (a) leader effects, (b) killer effects, (c) follower effects, and (d) victim effects, and standardized the values. Based on these standardized values, scores of a frame's activity versus passivity (APS) and of a frame's reinforcing power versus its displacing power (RDS) were computed. A frame with scores close to zero on both APS and RDS have a balanced role profile; frames high on APS and RDS are (a) leader frames, frames high on APS but low on RDS are (b) killer frames, frames low on APS and high on RDS are (c) follower frames, and frames low on both APS and RDS are (d) victim frames.

The results support and extend the findings from the previous analysis. The "Boost the economy!" frame acted strongly as a killer frame that was powerful enough to displace other frames. The amorphous "mixed" frame and the "Bailout *Opel*" frame were the primary victims of other frames. The government action frame ("Let the government fix it!") often reinforced other frames. This can mean that it was compatible with other frames or that it was instantly countered by alternative frames. The same is true for the "Disempower the Banks" and the "Bailout the Industry" frames, but to a lesser degree. Two frames often benefited from other frames: the "Bailout the banks" frame and the "Tame the economy" frame (Table 4). This indicates that the residual frames that are assembled in the "mixed" frame were easily displaced by more coherent and powerful frames. These minor frames can therefore be considered "space fillers" in media coverage, and the corresponding frame sponsors must be considered the losers in the framing struggle. The "Bailout *Opel*" frame was easily displaced as well, which may reflect its dependency on current newsworthy events.

Heterogeneity of framing. RQ3 necessitates investigating the diversity of framing over time. The standardized entropy E ($E = H_{obs} / H_{max}$) across the eight frames was calculated based on the week-by-week data. Entropy is a measure of deviation from a uniform frequency distribution over a predefined set of categories. p_i is the relative frequency of category i (i.e., the prevalence of frames), and c is the number of categories (i.e., eight):

$$E_t = \frac{H_t}{H_{max\,t}} = -\frac{\sum_{i=1}^{c} p_i \log_2 p_i}{\sum_{i=1}^{c} \frac{1}{c}\log_2\frac{1}{c}}.$$

Values range between "1" (equitability and high diversity) and "0" (hegemony and low diversity). Diversity of framing was generally high throughout the period under study ($M = .90$), and there was no trend toward more or less diversity. Rather, there is a cyclical pattern in the time series. Phases of even higher diversity ($Max = .97$) blended into phases during which

the media focused on a smaller set of frames ($Min = .80$). The oscillation of diversity was most intense in its first cycle ($\Delta MinMax = .17$), followed by a weaker second cycle ($\Delta MinMax = .12$); after two cycles, the level of diversity remained constant ($\Delta MinMax = .05$). The amplitude of oscillation is attenuated with higher temporal distance to the key event.

Predicting Frames' Competitiveness. For assessing relations between frame potentials and frame competitiveness (RQ4), we shift levels of analysis from news stories ($n = 4,177$) to frames ($n = 8$). Because of the low number of cases, our findings are only tentative. We z-transformed frame potential indicators (continuity, elite sponsorship, positivity, and resonance) and used these z-scores to predict the killer, leader, victim, and follower scores of the issues, plus the prevalence of frames, the APS, the RDS, and the FSS.

Continuity is positively associated (we mention all correlations > .40, independent of their level of significance) with a leader role, RDS, and FSS and negatively associated with a victim role, as expected. Elite sponsor frequency is negatively associated with a follower role and the overall prominence of the frame (not expected). Negativity is positively associated with a leader role, RDS, and FSS as expected. Resonance is strongly and significantly positively associated with a frame's killer and leader roles and with APS and FSS; it is negatively and significantly associated with its victim role (as expected). When condensing the four frame feature ranks into a summary score ("continuity" plus "elite sponsorship" plus "negativity" plus "resonance"), we find a positive correlation with leader scores ($r = +.844$; $t(6) = 3.861$; $p = .008$), APS ($r = +.696$; $t(6) = 2.374$; $p = .055$), RDS ($r = +.535$; $t(6) = 1.551$; $p = .172$), and FSS ($r = +.730$; $t(6) = 2.617$; $p = .040$), while the correlation with victim scores is negative ($r = -.714$; $t(6) = -2.501$; $p = .046$). That some of these findings reach statistical significance is surprising, considering the low statistical power. These preliminary findings only partially conform to our expectations. Our measures of frame potential seem to positively predict leader and victim scores, frame activity, and total FSSs, as expected, but they are not consistently related to killer scores of frames (contrary to expectations), and they are—unexpectedly—positively related to RDS.

Discussion

The results show that the "Lehman Brothers" key event was followed by an intensive frame contest, a struggle for the dominant definition of an uncertain situation and the conclusions to be drawn from that definition. The framing process and its inherent mechanisms—as outlined by framing theory—are remarkably stable, however. Status and resources of frame sponsors are— even in the face of a major economic crisis that was obviously caused by some of these sponsors and that threatened the established economic

system—critical success factors for frames to enter and take hold in the media debate. Furthermore, frames were more powerful when they were linked to culturally established beliefs, including beliefs in the adequacy of the current economic order. Seemingly, established cultural paradigms are only cautiously adapted to the current situation even if there is an obvious misfit between paradigm and situation.

After the set of frames had been established a few weeks after the key event, no frame was capable of dominating the media debate for a longer period of time, no frame vanished, and no new frames entered the debate. The most important reason is that various interests were potentially affected by the economic crisis and the reactions to it. Various frames—tied to different actors and interests—were competitive and were adapted to fit the changing situations. Although no frames were permanently driven out of the "framing market," the primary frames promoted by the government, the financial economy, and the industry were capable of temporarily displacing several minor frames (the "mixed" frame). The more powerful frames competed on par with one another. Our tentative analyses of the association between frame potential and frame success suggest that frames perform better in a frame contest if they are resonant with deep-rooted cultural beliefs. Also, negative and continuously present frames appear to be more competitive. In contrast, elite sponsorship of a frame does not seem to systematically relate to its competitive performance. Elite sponsors seem to be a necessary condition to establish a frame with media resonance (in line with Hänggli, 2012), but it does not enhance a frame's successfulness once established. However, we will need further evidence on this matter to draw more robust conclusions.

Corresponding to the strong, mostly coequal competition between frames, the diversity of framing followed no upward or downward trend. During the first few months of the debate, the level of diversity oscillated, pointing to a process of restoring a dynamic equilibrium after a shock to the system: After the key event, even well-established stakeholders and journalists had to adapt to the new uncertain situation and developed their framing strategies, which they refined by and by until a point of saturation was reached, restoring a relatively stable equilibrium.

Our results suggest that divergence of elites leads to a diverse and dynamic landscape of frames in media debate. But this does not mean that the economic or political status quo is questioned—only one frame, the "Disempower the Banks" frame openly challenged existing power structures. So even when elites are divided on details of economic policy, the frames selected by the mass media (and forged by social elites) demonstrate high consensus and conservatism regarding the social and economic order in general. Diversity seemingly does not guarantee comprehensiveness and pertinence of media framing.

Methodological limitations. There are some methodological issues that must be considered to not misinterpret the results reported above. First, the decision about which variables to include in the cluster analysis influences the results; however, care was taken to include all actors and interests that were frequently named in the debate. Second, by concentrating on media coverage alone, the frame struggle is inferred from the resulting patterns of coverage. Thereby, we only see the successful frames and infer that their properties are critical success factors. However, we do not know the properties of the unsuccessful frames. Third, we tracked the development of frames after a key event, but have not analyzed the framing of economic policy before the key event struck, allowing no pre–post comparison. Fourth, the findings are limited to the debate about government interventions in a particular country in a particular time frame; other debates at other times in other places may show different dynamics. Fifth, the public opinion data we draw on were collected after the time span covered by the content analysis—congruence between public opinion and frames might therefore reflect reactions to the crisis or to media coverage rather than constraints imposed on the frame struggle by shared cultural beliefs. However, earlier polling data support our interpretation: Though incomplete, surveys from 2005 onward indicate high continuity of the population's economic preferences and beliefs (Table 1).

Implications. The study shows that the dynamics of the news discourse are limited even when facing a powerful key event and when driven by a diverse set of actors. While the content of frames is adapted to the course of events, their introduction, competition, and possible disappearance still follows a pattern that is known to generally guide news discourse: a preference for resourceful self-interested frame sponsors, a reliance on established cultural beliefs, and the journalistic attempt to counterbalance various viewpoints. The notion that crises are turning points in a frame struggle that open up the public forum for alternative ways of thinking did not hold in our analysis. Representatives of the Federal government and of major economic interests managed to tie their interests to narratives that tell the story of the financial crisis in ways that implicitly suggest or directly call for policy in their favor. Other voices are granted but marginal space in established news publications. Competitive frames largely resonate viewpoints shared by wide strata of society as part of basic cultural beliefs. Frames that offer a substantially new take on the crisis, its causes, and implications are virtually undetectable.

This may be regarded as functional for postmodern societies in terms of integration, but not in terms of adaptation. Societies need a set of basic cultural, political, and economic beliefs that constitute a shared understanding of social reality. Especially in face of a far-reaching crisis, these beliefs may be crucial to ensure that a society does not drift apart. From that perspective, the media helped to organize the "rally around the flag" in times of crisis.

Another point of view is that the stability of the framing process in mainstream news media reflects the stability of the dominant discourse, despite the liberal constitution of western media systems. This limits the possibilities for challenging social paradigms, leading to inertia of media framing. The actors in possession of cultural and economic resources reinforce the dominant discourse that is based on narratives supporting their position of power. This is dysfunctional when these dominant and established ways of responding to symptoms of the crisis fail. From that perspective, the media hampered effective responses to the crisis.

Beyond functionalist considerations, future research may further investigate the conditions under which the structure of framing changes as a consequence of key events. When and why do viewpoints and actors challenging cultural beliefs enter the public spotlight? Considering the inertia of the framing at the onset of a supposedly all-changing financial crisis, these questions appear even more crucial than before if we want to understand how social, political, and economic beliefs change and persist as foundations for public opinion.

Funding

References

Baumgartner, F. R., De Boef, S., & Boydstun, A. E. (2008). *The decline of the death penalty and the discovery of innocence*. Cambridge: University Press.

Benford, R. B., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology*, *26*, 611–639.

Bennett, W. L., Lawrence, R. G., & Livingston, S. (2007). *When the press fails: Political power and the news media from Iraq to Katrina*. Chicago, IL: University of Chicago Press.

Berinsky, A. J. (2006). American public opinion in the 1930s and 1940s: The analysis of quota-controlled sample survey data. *Public Opinion Quarterly*, *70*, 499–529. doi:10.1093/poq/nfl021

Brosius, H. B., & Eps, P. (1995). Prototyping through key events: News selection in the case of violence against aliens and asylum seekers in Germany. *European Journal of Communication*, *10*, 391–412. doi:10.1177/0267323195010003005

Brosius, H. B., & Kepplinger, H. M. (1995). Killer and victim issues: Issue competiton in the agenda-setting process of German television. *International Journal of Public Opinion Research*, *7*, 211–231. doi:10.1093/ijpor/7.3.211

Carragee, K. M., & Roefs, W. (2004). The neglect of power in recent framing research. *Journal of Communication*, *54*, 214–233. doi:10.1111/j.1460-2466.2004.tb02625.x

Chong, D., & Druckman, J. N. (2007). Framing theory. *Annual Review of Political Science*, *10*, 103–126. doi:10.1146/annurev.polisci.10.072805.103054

Edy, J. A., & Meirick, P. C. (2007). Wanted, dead or alive: Media frames, frame adoption, and the support for the war in Afghanistan. *Journal of Communication*, *57*, 119–141. doi:10.1111/j.1460-2466.2006.00332.x

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, *43*, 51–58. doi:10.1111/j.1460-2466.1993.tb01304.x

Entman, R. M. (2003). Cascading activation: Contesting the White House's frame after 9/11. *Political Communication*, *20*, 415–432. doi:10.1080/10584600390244176

Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, *95*, 1–37.

Geiß, S. (2011). Patterns of relationships between issues: An analysis of German prestige newspapers. *International Journal of Public Opinion Research*, *23*, 265–286.

Hänggli, R. (2012). Key factors in frame building: How strategic political actors shape news media coverage. *American Behavioral Scientist*, *56*, 300–317.

Hänggli, R., & Kriesi, H. (2012). Frame construction and frame promotion (Strategic framing choices). *American Behavioral Scientist*, *56*, 260–278. doi:10.1177/0002764211426325

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago, IL: University of Chicago Press.

Kepplinger, H. M., & Habermeier, J. (1995). The impact of key events on the presentation of reality. *European Journal of Communication*, *10*, 371–390. doi:10.1177/0267323195010003004

Kepplinger, H. M. (2007). Reciprocal effects: Toward a theory of mass media effects on decision makers. *Harvard International Journal of Press/Politics*, *12*(2), pp. 3–23. doi:10.1177/1081180X07299798.

Kepplinger, H. M., Geiß, S., & Siebert, S. (2012). Framing scandals: Cognitive and emotional media effects. *Journal of Communication*, *62*, 659–681.

Kühne, R., Schemer, C., Matthes, J., & Wirth, W. (2011). Affective priming in political campaigns: How campaign-induced emotions prime political opinions. *International Journal of Public Opinion Research*, *23*, 485–507.

Lecheler, S., & de Vreese, C. H. (2011). Getting real: The duration of framing effects. *Journal of Communication*, *61*, 959–983. doi:10.1111/j.1460-2466.2011.01580.x

Matthes, J. (2012). Framing politics: An integrative approach. *American Behavioral Scientist*, *56*, 247–259. doi:10.1177/0002764211426324

Matthes, J., & Kohring, M. (2008). The content analysis of media frames: Toward improving reliability and validity. *Journal of Communication*, *58*, 258–279. doi:10.1111/j.1460-2466.2008.00384.x

Nisbet, M. C., Brossard, D., & Kroepsch, A. (2003). Framing science: The stem cell controversy in an age of press/politics. *International Journal of Press/Politics*, *8*, 36–70. doi:10.1177/1081180X02251047

Nisbet, M. C., & Huge, M. (2006). Attention cycles and frames in the plant biotechnology debate: Managing power and participation through the press/policy connection. *International Journal of Press/Politics*, *11*, 3–40. doi:10.1177/1081180X06286701

Noelle-Neumann, E., & Petersen, T. (2005). *Alle, nicht jeder: Einführung in die Methoden der Demoskopie [The entirety, but not everybody: Introduction to the methodology of opinion polling]*. (4th ed.). Heidelberg: Springer.

Ross, S. D., & Bantimaroudin, P. (2006). Frame shifts and catastrophic events: The attacks of September 11, 2001, and New York Times's portrayals of Arafat and Sharon. *Mass Communication and Society*, *9*, 85–101. doi:10.1207/s15327825mcs0901_5

Scheufele, B. (2006). Frames, schemata, and news reporting. *Communications*, *31*, 65–83. doi:10.1515/COMMUN.2006.005

Valkenburg, P. M., Semetko, H. A., & de Vreese, C. H. (1999). The effects of news frames on reader's thoughts and recall. *Communication Research*, *26*, 550–569. doi:10.1177/009365099026005002

van Gorp, B. (2005). Where is the frame? Victims and intruders in the Belgian press coverage of the asylum issue. *European Journal of Communication*, *20*, 485–508. doi:10.1177/0267323105058253

Wolfsfeld, G., & Sheafer, T. (2006). Competing actors and the construction of political news: The contest over waves in Israel. *Political Communication*, *23*, 333–354. doi: 10.1080/10584600600808927

Zhao, X., Liu, J. S., & Deng, K. (2012). Assumptions behind intercoder reliability indices. *Communication Yearbook*, *36*, 419–480.

Biographical Notes

Stefan Geiß (Dr. phil., Johannes Gutenberg University Mainz, 2014) is a research associate at the Department of Communication, Johannes Gutenberg University Mainz.

Mathias Weber (Dr. phil., Johannes Gutenberg University Mainz, 2014) is a research associate at the Department of Communication, Johannes Gutenberg University Mainz.

Oliver Quiring (Dr. rer. pol., University of Erlangen-Nuremberg, 2003) is a professor of Communication Studies at the Department of Communication, Johannes Gutenberg University Mainz.