

Leonidas Hatzithomas\*, Christina Boutsouki and Yorgos Zotos

# The role of economic conditions on humor generation and attitude towards humorous TV commercials

DOI 10.1515/humor-2015-0111

**Abstract:** A two-phase experimental study investigates the role of economic conditions on humor generation and on the relationship between perceived humor and attitude toward the ad (Aad). It designates that the economic context affects the generation of humor and the relationship between perceived humor and Aad; TV commercials can more effectively create humor as well as positive Aad in an expansion rather than in a recession. The generation of humor during a recession, requires a combination of high levels of perceived surprise and low levels of perceived irritation. In the same vein, attitude towards a humorous ad, in a recession, increases significantly only when there is high perceived humor and low perceived irritation. Specific managerial and theoretical implications are discussed.

**Keywords:** humorous advertising, economic conditions, surprise, irritation, Greece

## 1 Introduction

In recent years, many developed economies over the world are in recession<sup>1</sup> with significant effects on both commercial and social activities (UN 2013).

---

<sup>1</sup> According to the most prevalent definition, “a recession is two successive quarters of negative growth in gross domestic product (GDP)” (Tellis and Tellis 2009: 304). On the other hand, economic growth is defined as the “sustained increase in real per capita incomes” (Gould 1972: 2).

---

**\*Corresponding author: Leonidas Hatzithomas**, Department of Business Administration, University of Macedonia, Egnatia 156, Thessaloniki 54006, Greece, E-mail: hatzithomas@uom.edu.gr

**Christina Boutsouki**, Department of Economics, Aristotle University of Thessaloniki, Thessaloniki, Greece, E-mail: echbouts@econ.auth.gr

**Yorgos Zotos**, Department of Communication & Internet Studies, Cyprus University Of Technology, Limassol, Cyprus, E-mail: yorgos.zotos@cut.ac.cy

Firms face significant decline in capital and revenue, advertising expenditure drops, and people strive to cope with the magnitudes of the socio-economic changes. Economic contractions are also often associated with climbing unemployment and inflation (Rothstein 2011), increased depression and suicide levels, (Goldman-Mellor et al. 2010) intense feelings of uncertainty, hopelessness and irritability (Ostamo et al. 2001; Ünal-Karagüven 2009).

Economic cycles have also been associated with fluctuations in advertising expenditures indicating a positive correlation between economic conditions and advertising expenditure (Deleersnyder et al. 2009; Lamey et al. 2007; Srinivasan and Lilien 2009). However, prior studies did not look into the role of economic periods on the effectiveness of different advertising executions such as humorous appeals. Several advertising practitioners suggest that humor could be an effective advertising approach in recessions (Bryson 2010; Neff 2008; Marketing Research 2009) as people are looking for relief through humor (Wong 2013). Others suggest a cautious approach to humor (Zmuda 2008), as they question the effectiveness of aggressive and irritating humorous approaches in economic hardship (Vranica 2009). The increasing frequency and magnitude of the effects of financial crises lately (Kindleberger and Aliber 2011; Stiglitz 1999), pinpoint the importance to understand the rapport between economic conditions and the effectiveness of humorous commercials.

The present study aims to explore the effect of economic conditions (recession or expansion) on (a) the generation of humor and (b) on the association between perceived humor and Aad. An experimental design approach (in two phases) provides the methodological foundation of the study. The experiment was conducted in Greece in two distinct time periods signifying expansion and contraction of the Greek economy. The first phase of the experiment was conducted in the fall of 2006, a year with a 4.1 percent GDP annual rate expansion (IMF 2007). The experiment was then repeated in the fall of 2013, a year with a 4.2 percent GDP annual rate contraction (IMF 2013a).

The study proposes that adverse economic conditions affect (a) the potential transformation of surprise into humor (as described by Alden et al. 2000) and (b) the impact of perceived humor on Aad (see also Sultanoff 1995). In particular, the interaction of economic conditions with the perceived irritation from a commercial could account for the molded relationship between surprise, humor and Aad. The present study provides further insight into the effect of economic environment on advertising perceptions.

## 2 Theoretical background & research hypotheses

### 2.1 Economic conditions and attitude toward humorous commercials

Recessions and economic downturns exert intense psychological and economic pressure on entrepreneurs and citizens (Solantaus et al. 2004). Economic stress often induces feelings of uncertainty, hopelessness, loneliness and depression (Ostamo et al. 2001). The loss of financial stability has also been associated with emotional distress, depression, demoralization and increased irritability for consumers (Conger et al. 1994; Conger et al. 2002; Ünal-Karagüven 2009).

Studies on the effect of economic conditions on consumer preferences for entertainment products, media personalities and commercial executions (Gowgiel and McIntosh 2010; Nielsen Company 2012; Pettijohn and Jungeberg 2004) suggest that in economic hardship, communication approaches that foster feelings of safety and security seem to attract the audience attention (Pettijohn and Tesser 1999). A longitudinal analysis of motion pictures confirmed a long-standing suspicion, that during hard economic times comedies are very popular to the audience (Pettijohn 2003). Moreover, entertainment and advertising professionals have often proposed humor as an effective advertising creative approach in economic recessions (Andreeva 2009; Anonymous 2008; Reinhard 2001).

Humor has been traditionally advocated as a coping mechanism (Führ 2002; Henman 2001; Martin et al. 1993; Nezlek and Derks 2001) that permits people to deal with routine anxieties, depression and hopelessness, achieving psychological and physical equilibrium (Freiheit et al. 1998; Kuiper and Martin 1993; Kuiper et al. 1998; Kuiper et al. 1992; Martin et al. 2003). A greater sense of humor has been associated to increased hopefulness, (Vilaythong et al. 2003) and humorous appeals in advertising have been linked to positive feelings, such as cheerfulness and carefreeness (De Pelsmacker and Geuens 1999; Geuens and De Pelsmacker 1998). It is expected that in recessions consumers indicate a preference for humorous advertising messages, in order to diminish stress and increase hopefulness. Hence, it is suggested that:

**H1:** In a recession, humorous commercials generate more positive Aad compared to non-humorous commercials.

Yet, another question remains unanswered. Does the use of humor as a coping mechanism in economic difficulties signify that humorous commercials are more effective in recessions compared to expansions?

Despite the proliferation in humorous advertising research (Chung and Zhao 2003; Eisend 2009; Hatzithomas et al. 2011), very few studies seem to take a long term perspective using a longitudinal analysis of the use of humor in advertising (Beard 2005; De Pelsmacker and Geuens 1997; Pollay 1985; Yelkur et al. 2013). Beard (2005) discussed the propagation of humor in American advertising throughout the last century and highlighted the importance of societal and economic factors in affecting the use of humor in advertising. However, he did not look into the effect of economic conditions on the likeability of humorous ads. An analysis of 4,000 US consumer packaged-goods commercials (Nielsen Company 2012) designated humorous executions to be more appealing to consumers compared to price and promotion-centered ads, regardless of the economic period. Moreover, it suggests that humorous commercials are appreciated more in economic expansions than in recessions. Accordingly, it is suggested that:

**H2:** Humorous commercials create less positive Aad in a recession compared to an expansion.

## 2.2 Economic conditions and irritation impinging on the generation of humor in advertising

Research on humor in advertising mainly focuses on the element of incongruity resolution, a process imperative to create a humorous response (Alden and Hoyer 1993; Herzog and Larwin 1988). The concept of incongruity constitutes the core in four (comic wit, satire, sentimental comedy and full comedy) out of the five humor types proposed by Speck (1991). The fifth humor type, sentimental humor, involves only the arousal safety process. Incongruity resolution is the most popular humorous technique worldwide, constituting a “universal humorous language” (Alden et al. 1993). Focusing on incongruity resolution, Alden et al. (2000) developed and experimentally tested a model to explain how humor works in TV advertising. Perceived humorousness is attributed to the interdependence of five affective and cognitive mechanisms namely: schema familiarity, surprise caused by the advertising content, playfulness, warmth of the ad, and ease of incongruity resolution. Positive emotions of warmth and playfulness contribute to a playful, benign and safe context in which surprise can be easily transformed into humor. Surprise mediates the

effects of schema incongruity in perceived humorousness and it is an essential but not sufficient condition for the creation and appreciation of humor (Alden et al. 2000; Elpers et al. 2003).

Recent studies take a novel approach and look into the impact of humor on advertising effectiveness when negative emotions (e. g. fear, aggression, threat, violence) prevail (Mukherjee and Dubé 2012; Scharrer et al. 2006; Swani et al. 2013; Yoon and Tinkham 2013). Humor can complement negative emotions, notwithstanding some limitations. In a benign-violation hypothesis McGraw and Warren (2010: 2) suggest that the perception of humor, even in negative predisposition scenarios, depends on three prerequisites: (1) A situation must be appraised as a violation, (2) a situation must be appraised as benign, and (3) the two appraisals must occur simultaneously. As a perceived norm violation, an incongruity is essential for the generation and appreciation of humor, although it often induces negative emotions. Hence, the incongruity can be interpreted as humorous if the situation is considered tolerable and benign, or if the respondent is psychologically distant from the disruption.

Prior research in TV advertising has focused on irritation as it is well-thought-out that viewers are more likely to experience irritation rather than anger or rage when viewing an ad (Aaker and Bruzzone 1985; De Pelsmacker and Van den Bergh 1999). Irritation (or annoyance) is a mild form of anger, as opposed to rage which is often described as intense anger (Plutchik 1980; Spielberg and Sydeman 1994). According to the benign-violation hypothesis, it is expected that irritation towards the advertising stimulus can be associated with humor without negative implications on perceived humorousness, as TV advertising is considered a safe and benevolent context (Kleinke 1988; Potts and Sanchez 1994). However, in a recession, people are more likely to feel emotional distress, depression and irritability (Conger et al. 2002; Starrin et al. 1997; Ünal-Karagüven 2009). Bower (1991) indicated that people in a positive mood recall mainly pleasant memories, while people in a negative mood recall more unpleasant experiences. Thus, people experiencing an economic crisis would have the tendency to retrieve irritating memories or thoughts during their exposure to a TV commercial that they perceive as annoying, compared to people in an economic expansion. They are more likely to perceive the context of the commercial as malign rather than benign, inhibiting the transformation of surprise into humor and diminishing perceived humorousness.

However, when these people perceive a commercial as non-irritating, they consider the TV advertising context as safer and more benign in comparison to their strenuous daily life in a recessionary environment. Mood management

theory also proposes that television can help people experiencing a stressful daily routine to repel negative thoughts and restore positive mood states (Zillmann and Bryant 1985; Zillmann 1988). Thus, it is suggested that:

**H3:** Economic conditions and the level of perceived irritation towards the ad have a moderating effect on the relationship between perceived surprise and perceived humor, such that:

- a) When perceived irritation towards the commercial is high, perceived surprise is more negatively related to perceived humor, in a recession than in an expansion.
- b) When perceived irritation towards the commercial is low, perceived surprise is more positively related to perceived humor, in a recession than in an expansion.

### 2.3 Economic conditions and irritation affecting the relationship between perceived humor and Aad

Contextual factors are reported to moderate the impact of different advertising styles on attitudes (De Pelsmacker et al. 2002a). Emotional commercials are considered more effective and are reported to create more positive Aad, when embedded in a positive or funny media context (De Pelsmacker et al. 2002b; Goldberg and Gorn 1987). Commercials can often serve as context for other commercials, influencing individuals' affective reactions to them (Poncin and Derbaix 2009). A commercial with low or moderate levels of emotional intensity elicits more positive or more negative affective reactions when it follows another strongly positive or strongly negative commercial respectively. Irritation caused by either annoying or a large number of commercials has a negative effect on individuals' attitude toward a neutral commercial that follows (Fennis and Baker 2001).

The adverse, strenuous economic environment is associated with high irritation levels and represents a negative affective context for humorous appeals. Within this unpleasant and irksome context a negative relationship between perceived humor and Aad is highly probable. On the contrary, in low irritation levels, commercial viewing often serves as a getaway from a tedious, everyday routine (Potts and Sanchez 1994). It provides a pleasurable context where perceived humor can positively affect Aad. Hence it is assumed that:

**H4:** Economic conditions and the level of perceived irritation towards the ad have a moderating effect on the relationship between perceived humor and Aad, such that:

- a) When perceived irritation towards the commercial is high, perceived humor is more negatively related to Aad, in a recession than in an expansion.
- b) When perceived irritation towards the commercial is low, perceived humor is more positively related to Aad, in a recession than in an expansion.

## 3 Methodology

### 3.1 Overview

An experimental design approach with two between-subjects factors (type of advertising message and economic periods) was used to test the study's hypotheses. The experiment was designed and performed in two distinct phases corresponding to different time periods and economic circumstances. A convenience sample of final year undergraduate students at Aristotle University of Thessaloniki, Greece, was used. The first phase of the experiment was conducted in November 2006. At the time, the growth rate of real GDP in Greece was 4.1 percent (IMF 2007). The experiment was repeated in November 2013, at the exact location and to a similar audience. The country was in the midst of the worst economic crisis recorded in industrialized economies since World War II (IMF 2013b: 26). GDP in Greece decreased by 4.2 percent in 2013 (IMF 2013a). The Greek sovereign debt crisis between 2009 and 2013 has resulted in a sharp (22%) contraction of GDP and a dramatic increase in unemployment (27% of the labor force, 60% in young people). This has severely affected the psychology of Greek citizens, especially young people, leading to a rise in the cases of depression (from 3.3% to 8.2%) and the associated symptoms (restlessness, fatigue and irritability) (Economou et al. 2014; 2013a; 2013b).

### 3.2 Procedure and sample

The experiment involved a 4 [type of advertising message: comic wit (involves only incongruity-resolution), sentimental comedy (combination of incongruity-resolution and arousal-safety), satire (combination of incongruity-resolution and humorous-disparagement) and no humor] x 2 [economic periods: expansionary and recessionary] between-subject factorial design. This certified that the influence of arousal-safety and humorous disparagement on incongruity resolution was taken into account. Overall, 239 final year undergraduates (120 students, 81 females, average age 21.7 years old, in 2009 and 119 students, 72 females,

average age 21.4 years old in 2013) participated in the experiment. Students were offered a bonus grade for their participation in the experiment.

The experimental process was kept identical in both phases of the study. Four experimental sessions were run consecutively on the same day, in the following order: wit, sentimental comedy, satire and no humor. Each condition (message type) was replicated across three, familiar to young people product categories, deodorant, beer and youth furniture. The order of the advertisements in both experimental phases was kept identical because ads could serve as context for other ads, changing consumers' emotional responses (Poncin and Derbaix 2009). Participants in the four experimental groups were matched for age ( $F = 1.01$ ,  $df = 3$ ,  $p < 0.39$ ) and gender ( $X^2 = 0.33$ ,  $df = 3$ ,  $p < 0.96$ ) as humorous advertisements seem to be more appealing to men than women (Madden and Weinberger 1982). Moreover, there was no overlap between participants in the different groups, reducing the potential for contamination between the treatments.

Participants were invited to watch and evaluate three commercials of Axe (deodorant), Bud Light (beer) and IKEA (furniture) for young people. These brands often incorporate humor as a core component of their advertising strategy (see also Alden et al. 1993). All commercials were new to the Greek market. Participants were informed that a well-known multinational advertising agency conducted a survey on these TV commercials, in order to broadcast them on Greek television. At the end of each commercial they were asked to fill in a questionnaire indicating their level of familiarity, attitude and emotional reactions.

### 3.3 Stimulus materials

Content analysis was used for the selection of the stimulus material. Two coders trained on Speck's humorous message taxonomy (1991), content analyzed 131 (20 AXE, 76 Bud Light, 25 IKEA) humorous and 36 (9 AXE, 11 Bud Light, 16 IKEA) non humorous commercials. They analyzed the commercials in terms of perceived humorousness and the type of humor incorporated. The coders worked individually. Discrepancies in coding were resolved by the authors in cooperation with the coders, taking into consideration Speck's (1991) definitions. The resulting consensus regarding the types of humor was used in each commercial.

In each brand, the commercials that most clearly represented the various message types were adopted. This resulted in twelve actual novel commercials. All commercials came from international campaigns and had not been aired in Greece before. The same commercials were used in both phases of the study.

Respondents were asked to rate the originality and freshness of the commercials. No significant differences were recorded between the groups ( $T = 0.516$ ,  $df = 358$ ,  $p < 0.606$ ). All commercials were of similar length (30 seconds), in English with Greek subtitles. The commercials incorporated mainly visual humor and did not include sensitive issues related to respondents' financial situation. The products advertised in the commercials are mainly consumed by the 18–35 age group. The average age of the samples used in both phases of the study fell within this age group. According to Percy and Elliott (2005), consumers tend to process more the commercials of the products and brands that they consider to be prospective purchases.

### 3.4 Measures

For each commercial, the dependent variable, ATTITUDE TOWARDS THE AD (Aad), was evaluated based on a 7-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree” (7). Participants rated the degree to which they valued the commercials as likable, interesting, convincing, pleasant, easy to recall, and effective (adopted from Baker and Kennedy 1994).

Perceived humor was measured by a 5-item scale (Zhang 1996) and perceived irritation by a 2-item scale (Duncan and Nelson 1985). Perceived surprise was measured by Izard's DES scale (Izard 1977). Responses ranged from (1) “strongly disagree” to (7) “strongly agree”. The translation/back-translation process was used for the scales' modification in Greek. Ad and brand familiarity were measured by a single-item scale ranging from (1) “completely unfamiliar” to (7) “completely familiar” (Baumgartner et al. 1997). Cronbach's Alpha was measured for internal consistency and satisfied Nunnally's (1978) criterion of 0.7. Particularly, Cronbach's alpha coefficient of reliability was 0.88 for Aad, 0.92 for perceived humor, 0.96 for perceived irritation, and 0.89 for perceived surprise.

An additional questionnaire assessing respondents' perceived impact of the economic crisis was used in the second phase (2013) for the manipulation of the economic cycle variable. It contained a 6-item scale for the psychological effects of recession (e. g. “because of the current economic slowdown I feel anxious”), a 3-item scale for perceived financial hardship (e. g. “the current economic situation impacted my financial security”) and a 2-item scale for expected future financial difficulties (e. g. “I think that the current economic slowdown will impact my future income”). Items were adopted from Sargent-Cox et al.'s (2011) and Voon and Voon's (2012) scales and ranged from “strongly disagree” (1) to “strongly agree” (7). Cronbach's alpha was 0.91 for the psychological

effects, 0.77 for perceived financial hardship and 0.75 for expected future financial difficulties.

### 3.5 Manipulation check

Humor manipulation was based on Zhang's (1996) scale for humor. The nine humorous commercials ( $\bar{x}=4.90$ ) were significantly more humorous than the three non-humorous commercials ( $\bar{x}=3.60$ ) ( $T=9.80$ ,  $df=715$ ,  $P<0.00$ ). One way ANOVA, (with Bonferroni post hoc test) indicated that the presence of all three humor types, consistently stimulates more humorous responses compared to their absence (in non-humorous ads) ( $F=72.61$ ,  $df=3$ ,  $p<0.00$ ). All three types, namely satire ( $\bar{x}=5.49$ ), comic wit ( $\bar{x}=5.19$ ) and sentimental comedy ( $\bar{x}=4.01$ ) were significantly more humorous than the non-humorous commercials ( $\bar{x}=3.60$ ).

In the economic conditions variable manipulation, three one-sample t-tests were performed to determine whether the answers to each scale were significantly different from the chance level (3.5). T-values for the psychological effects of contraction ( $T=7.60$ ,  $df=118$ ,  $p<0.00$ ,  $\bar{x}=4.49$ ), for perceived financial hardship ( $T=19.73$ ,  $df=118$ ,  $p<0.00$ ,  $\bar{x}=5.56$ ) and for expected future financial difficulties ( $T=18.25$ ,  $df=118$ ,  $p<0.00$ ,  $\bar{x}=5.82$ ) exceeded the critical t-value. This indicates that the participants were significantly affected by the economic crisis. Psychological effects were also found to exert a positive impact on perceived irritation towards the commercial ( $F=7.018$ ,  $p<0.008$ ) reinforcing the assumption that people in economic crisis are more prone to irritation.

## 4 Results

Analysis of covariance (ANCOVA) was conducted with type of advertising message (humorous or non-humorous) and economic period (expansion or recession) as the independent variables, ad familiarity and brand familiarity as the covariates and Aad as the dependent measure (Table 1). ANCOVA was used in order to (a) adjust for the effects of possible confounders, such as ad and brand familiarity, and (b) evaluate interactions. Familiarity measures were incorporated as covariates in order to control for pre-existing differences, since both the brands and the commercials used in this study were actual (see also Baumgartner et al. 1997).

**Table 1:** Aad: Type of advertising message (humor or non-humor).

Independent variables	Sum of Squares	df	Mean Square	F value	Significance
<b>Covariates</b>					
Ad Familiarity	8.43	1	8.43	4.97	0.03
Brand Familiarity	1.64	1	1.64	0.97	0.33
<b>Main Effects</b>					
Type of advertising message	62.11	1	62.11	36.66	0.00
Economic period	16.02	1	16.02	9.45	0.01
<b>Two-way Interactions</b>					
Type of advertising message * Economic period	2.85	1	2.85	1.68	0.20
Model	118.50	5	23.70	13.99	0.00
Residual	1,204.80	711	1.70		
Total	15,836.84	717			

Note: \* Economic Period (Hypotheses 1 and 2).

Humorous commercials seem to induce more positive Aad than the non-humorous ones in both recessionary and expansionary periods ( $F = 36.66$ ,  $df = 1$ ,  $p < 0.00$ ). This finding supports the preeminence of humorous commercials during recessions (hypothesis 1). All commercial executions (humorous and non-humorous) were deemed more appealing in the economic expansion scenario than in the recession ( $F = 9.45$ ,  $df = 1$ ,  $p < 0.01$ ). Thus, hypothesis 2, which posited that humorous commercials create more positive Aad during expansions as opposed to recessions, is supported. No interaction was found between the type of advertising message (humorous vs non-humorous) and the economic period ( $F = 1.68$ ,  $df = 1$ ,  $p < 0.20$ ).

We adopted Cohen et al.'s (2003) process in order to conduct a five-step hierarchical regression analysis (Table 2) to test hypotheses 3a and 3b. Hierarchical regression analysis allows the researcher to test for potential moderating effects of one or more variables on a relationship between two variables. All the independent and control variables were converted to z-scores, prior to the calculation of the interaction terms and regression statistics, in order to reduce any multicollinearity. Ad and brand familiarity (control variables) were entered first, followed by perceived surprise (independent variable) in the second step. Perceived irritation and economic period (moderators) were entered in the third step. Three two-way interaction terms (perceived surprise x perceived irritation; perceived surprise x economic period; perceived irritation x economic period) were entered in the fourth step. Finally, a three-way interaction term (perceived surprise x perceived irritation x economic period) was introduced in the fifth step for predicting perceived humor.

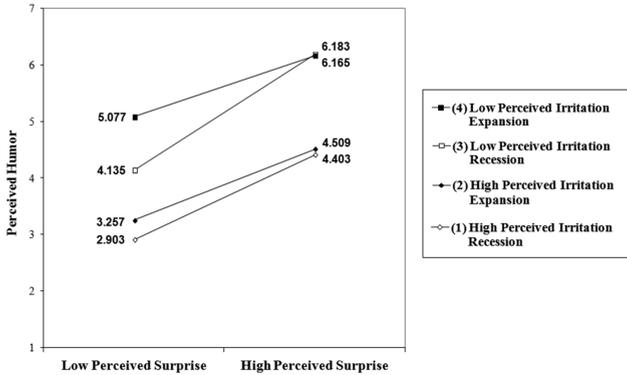
**Table 2:** Results of the hierarchical regression analysis for predicting perceived humor (Hypotheses 3a and 3b).

Independent variables	Step1	Step 2	Step 3	Step 4	Step 5
<b>Control variables</b>					
Ad familiarity	0.07	0.08*	0.04	0.04	0.04
Brand familiarity	0.12**	0.10**	0.12***	0.11***	0.11***
<b>Independent variable</b>					
Perceived surprise		0.45***	0.37***	0.38***	0.38***
<b>Moderators</b>					
Perceived irritation			-0.50***	-0.51***	-0.49***
Economic period			-0.11***	-0.11***	-0.12***
<b>Two-way interactions</b>					
Perceived surprise * Perceived irritation				-0.03	-0.02
Perceived surprise * Economic period				0.09***	0.09**
Perceived irritation * Economic period				0.04	0.02
<b>Three-way interaction</b>					
Perceived surprise * Perceived irritation* Economic period					-0.06*
R <sup>2</sup>	0.02	0.22	0.48	0.49	0.49
F	7.25***	68.08***	130.86***	84.19***	75.61***
ΔR <sup>2</sup>	0.02	0.20	0.26	0.01	0.00
ΔF	7.25***	186.00***	175.15***	3.81**	4.05*

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

As expected, perceived surprise and perceived irritation seem to exert significant effects on perceived humor ( $\beta = 0.45$ ,  $p < 0.000$  and  $\beta = -0.50$ ,  $p < 0.000$  respectively) (Table 2).

In line with hypothesis 3, economic period and the level of perceived irritation have a moderating effect on the relationship between perceived surprise and perceived humor ( $\beta = -0.06$ ,  $p < 0.045$ ) (Table 2). To understand the nature of these relationships, the three-way interaction among perceived surprise, economic period and perceived irritation was plotted, based on the process proposed by Dawson and Richter (2006) (Figure 1). As illustrated in Figure 1, intense irritation seems to impede on the transformation of surprise into humor in both economic periods. Nevertheless, the analysis does not



**Figure 1:** Three-way interaction between perceived surprise, perceived irritation, and economic conditions on perceived humor (Hypotheses 3a and 3b).

support hypothesis 3a as the relationship between surprise and humor does not become more negative in a recession than in an expansion.

Low levels of irritation seem to favor the transformation of surprise into humor in both economic periods. Consistent with hypothesis 3b, the relationship between perceived surprise and perceived humor turns into more positive in the recession-low irritation scenario (Figure 1). The slope difference tests further support this observation. The third slope (low irritation–recession scenario) was significantly different (more positive) from all other slopes,<sup>2</sup> in support of hypothesis 3b.

A five-step hierarchical regression analysis was also conducted to test hypotheses 4a and 4b (Table 3). All the independent and control variables were converted to z-scores. Ad and brand familiarity (control variables) were entered first, followed by perceived humor (independent variable) in the second step. The two moderators, perceived irritation and economic period, were introduced in the third step. Three two-way interaction terms (perceived humor x perceived irritation; perceived humor x economic period; perceived irritation x economic period) were the fourth step entries. Finally, the three-way interaction term (perceived humor x perceived irritation x economic period) was introduced in the fifth step of the analysis to predict attitude toward the ad.

As hypothesis 4 posited, economic period and the level of irritation towards the ad have a moderating effect on the relationship between perceived humor and Aad ( $\beta = -0.08, p < 0.004$ ) (Table 3). The three-way interaction among perceived

<sup>2</sup> Pair (1) and (3)  $t = -2.41, p < 0.016$ , pair (2) and (3)  $t = -2.89, p < 0.004$  and pair (3) and (4)  $t = -3.90, p < 0.000$ .

**Table 3:** Results of the hierarchical regression analysis for predicting attitude toward the ad (Hypotheses 4a and 4b).

Independent variables	Step 1	Step 2	Step 3	Step 4	Step 5
<b>Control variables</b>					
Ad familiarity	0.08*	0.03	0.02	0.02	0.02
Brand familiarity	0.09*	-0.01	0.03	0.02	0.02
<b>Independent variable</b>					
Perceived humor		0.79***	0.61***	0.60***	0.60***
<b>Moderators</b>					
Perceived irritation			-0.30***	-0.36***	-0.36***
Economic period			-0.09***	-0.09***	-0.25***
<b>Two-way interactions</b>					
Perceived humor * Perceived irritation				-0.09***	-0.00***
Perceived humor * Economic period				0.04	0.03
Perceived irritation * Economic period				0.05	0.00
<b>Three-way interaction</b>					
Perceived humor * Perceived irritation* Economic period					-0.08**
R <sup>2</sup>	0.02	0.62	0.69	0.70	0.70
F	5.60**	391.22***	315.30***	202.51***	182.86***
ΔR <sup>2</sup>	0.02	0.60	0.07	0.01	0.00
ΔF	5.60**	1144.51***	76.74***	5.21***	8.50**

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

humor, economic period and perceived irritation was plotted (Dawson and Richter 2006) to visualize the range and variation in Aad under the different conditions (Figure 2). As illustrated in Figure 2 high irritation reduces the impact of perceived humor on Aad in both economic periods. Nevertheless, the relationship between perceived humor and Aad does not become more negative in a recession compared to an expansion and as a result hypothesis 4a is rejected.

Overall, low perceived irritation towards the ad reinforces the relationship between perceived humor and Aad in both economic periods. However, in a recession, when irritation towards the ad is low, the relationship between perceived humor and Aad is more positive compared to that experienced in an expansion (hypothesis 4b is accepted) (Figure 2). The slope difference analysis further supports this observation. The third slope (low irritation–recession scenario) is significantly different (more positive) from all other slopes<sup>3</sup> suggesting the acceptance of hypothesis 4b.

<sup>3</sup> Pair (1) and (3)  $t = -4.44$ ,  $p < 0.000$ , pair (2) and (3)  $t = -3.43$ ,  $p < 0.000$  and pair (3) and (4)  $t = -2.92$ ,  $p < 0.000$ .



**Figure 2:** Three-way interaction between perceived humor, perceived irritation and economic conditions on Aad (Hypotheses 4a and 4b).

## 5 Discussion and conclusions

Despite the widespread acceptance of humor as an effective communication strategy, advertising professionals (Vranica 2009; Zmuda 2008) have expressed concerns about the likeability of humor in TV commercials during hard economic times. This study evaluates the role of economic conditions on humor generation and attitude towards humorous TV commercials. Humor seems to be a more favorable communication strategy compared to non-humorous approaches in both recessionary (H1) and expansionary periods. However, in consistency with Nielsen Company's (2012) study, our findings suggest that humor creates more positive Aad in expansions compared to recessions (H2). In order to elaborate on these results two hierarchical regression analyses were conducted. They provide an explanation of the interaction effects of economic conditions and irritation on the generation and the likeability of humor in TV commercials.

In contrast to our hypotheses (3a and 4a) the relationship between perceived surprise and perceived humor and that between perceived humor and Aad do not become more negative in a recession compared to an expansion, when perceived irritation towards the commercial is high. Perceived irritation exerts negative effects on perceived humor and Aad in both recessionary and expansionary periods. It impedes on the transformation of perceived surprise into perceived humor and diminishes the effects of perceived humor on Aad. Hence, the combination of humor and irritation is an uncertain, risky communication strategy, when the objective is to significantly improve Aad (see also Aaker and Stayman 1990).

According to hypotheses 3b and 4b, when perceived irritation towards the commercial is low, perceived surprise is more positively related to perceived humor, and perceived humor is more positively related to Aad, in a recession rather than in an expansion. Particularly during an expansion, commercials are perceived as very humorous, even in the case they combine low levels of perceived surprise with low levels of perceived irritation. On the contrary, in a recession, TV commercials are perceived as very humorous, only when they elicit simultaneously high levels of perceived surprise and low levels of perceived irritation. In a similar vein, during an expansion, even commercials with low levels of perceived humor can lead to very positive Aad. In a recession however, the attitude towards humorous commercials increases significantly, only when perceived humor is high and perceived irritation is low. Hence, it appears that only TV commercials, which trigger real, intense emotions of surprise and humor, as well as low levels of irritation, can be effective in creating significantly more positive Aad in a recession. The absence (presence) of these conditions leads to a more significant decrease (increase) respectively in the attitude toward a humorous ad, in a recession rather than in an expansion.

Our explanation of the reasons why humor creates more positive Aad in an expansion than in a recession, is consistent with the mood-management theory (Zillmann 1988), predicting that individuals regulate their states of mood via selective exposure to entertainment media. The higher an individual's stress level is, the higher the possibility is to watch a comedy because it helps him/her relax (Anderson et al. 1996). However, people in a bad mood avoid prime-time comedy, because it involves hostile, putdown and humiliating humor (Stocking et al. 1977) as it does not seem to satisfy their needs for relaxation. Only "effective humor" can serve as a mood regulator, helping people evade the stressful everyday reality. In this vein, Mark Barden, partner at brand consultancy *EatBigFish* mentioned "In a recession, when there's a lot of doom and gloom in the air, it is precisely the time when [consumers] need to have a laugh about it, but it has to be carefully done or you could look like a fool that doesn't understand" (cited at Zmuda 2008: 27).

The present study builds on the advertising literature on the generation and appreciation of humor (Alden et al. 2000; Elpers et al. 2003), by underlining the economic environment as a contextual factor. The economic setting influences people's mood as well as the affective mechanisms that are involved in the creation of humor. Our findings disclose a new line of work in advertising research, on the effects of macro-economic and social factors on the perception of humor. They also imply that advertising research apart from being culturally-dependent (Crawford and Gregory 2015), relies on the economic-context that seems to impose new boundaries on the study of humor in advertising.

Economic conditions may influence not only the favorability of humorous advertising (Aad), but also the generation of humor itself: Effective humorous commercials are more difficult to be created during hard economic times. High levels of humor should be combined with high levels of surprise and low levels of irritating appeals in order to improve Aad, in a recession. Annoying, non-surprising ad stimuli may result in lower levels of perceived humor and Aad.

## 6 Limitations and further research

The analysis in the present study is based on a convenience student sample. As such, results should be treated with caution. However, young educated people were the ones mostly affected by the Greek sovereign debt crisis (Economou et al. 2014, 2013a, 2013b). Being in an extremely difficult and unsafe economic environment, we value their perception and attitude may be indicative of the whole population.

The present study is also culture specific as it concentrates on Greek consumers. Cultural differences may limit the generalizability of the results and therefore further experimental research should be undertaken to replicate the findings of this study in some major world economies such as the USA, European Union, China, and Russia. Moreover, it would be of interest to study the interaction effects of economic and cultural variables on the likeability of TV humorous commercials over the years.

We used a two-phase experiment for the analysis of advertising messages across different economic periods. The manipulation check verified that participants in the second phase of the experiment were significantly affected by the economic crisis. However, the study did not control for other temporal effects. Future research endeavors could focus on further exploring issues of correlation and causality between economic conditions and creative advertising strategies with the use of a longitudinal data analysis (see Tellis and Tellis 2009).

Our study examined the interaction effect of economic conditions and humorous appeals on attitude toward the ad. Future research could, also explore the interaction effects on other measures of advertising effectiveness such as attitude toward the brand, arousal and valence, biometrics and/or sales.

## References

- Aaker David A. & Donald E. Bruzzone. 1985. Causes of irritation in advertising. *The Journal of Marketing* 49(2). 47–57.

- Aaker, David A. & Douglas M. Stayman. 1990. Measuring audience perceptions of commercials and relating them to ad impact. *Journal of Advertising Research* 48(2). 47–57.
- Alden Dana L., Wayne D. Hoyer & Chol Lee. 1993. Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *The Journal of Marketing* 57(2). 64–75.
- Alden Dana L. & Wayne D. Hoyer. 1993. An examination of cognitive factors related to humor-ousness in television advertising. *Journal of Advertising* 22(2). 29–37.
- Alden Dana L., Ashesh Mukherjee & Wayne D. Hoyer. 2000. The effects of incongruity, surprise and positive moderators on perceived humor in television advertising. *Journal of Advertising* 29(2). 1–15.
- Anderson Daniel R., Patricia A. Collins, Kelly L. Schmitt & Robin Smith Jacobvitz. 1996. Stressful life events and television viewing. *Communication Research* 23(3). 243–260.
- Andreeva N. 2009. Networks let bad times roll. *Hollywood Reporter* 408(3). 3.
- Anonymous 2008. Recession anxiety? Lighten up. *Credit Union Magazine* 74(9). 14.
- Baker Stacey Menzel & Patricia F. Kennedy. 1994. Death by Nostalgia: A diagnosis of context-specific cases. *Advances in Consumer Research* 21(1). 169–174.
- Baumgartner Hans, Mita Sujan & Dan Padgett. 1997. Patterns of affective reactions to commercials: The integration of moment-to-moment responses into overall judgments. *Journal of Marketing Research* 34(2). 219–232.
- Beard, Fred K. 2005. One hundred years of humor in American advertising. *Journal of Macromarketing* 25(1). 54–65.
- Bower, Gordon H. 1991. Mood congruity of social judgments. In J. P. Forgas (ed.), *Emotion and social judgments*, 31–53. New York: Pergamon Press.
- Bryson, Emily York. 2010. Snickers uses humor to satisfy generations of hunger. *Advertising Age* 81(13). 22–22.
- Chung Hwiman & Xinshu Zhao. 2003. Humor effect on memory and attitude: Moderating role of product involvement. *International Journal of Advertising* 22(1). 117–144.
- Cohen Jacob, Patricia Cohen, Stephen G. West & Leona S. Aiken. 2003. *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.), Mahwah, NJ: [Lawrence Erlbaum Associates](#).
- Conger Rand D., Xiaojia Ge, Glen H. Elder, Frederick O. Lorenz & Ronald L. Simons. 1994. Economic stress, coercive family process, and developmental problems of adolescents. *Child Development* 65(2). 541–561.
- Conger Rand D., Lora Ebert Wallace, Yumei Sun, Ronald L. Simons, Vonnie C. McLoyd & Gene H. Brody. 2002. Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology* 38(2). 179–193.
- Crawford Heather J. & Gary D. Gregory. 2015. Humorous advertising that travels: A review and call for research. *Journal of Business Research* 68(3). 569–577.
- Dawson, Jeremy F. & Andreas W. Richter. 2006. Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology* 91(4). 917–926.
- De Pelsmacker Patrick & Joeri Van den Bergh. 1999. Advertising content and irritation: A study of 226 TV commercials. *Journal of international consumer marketing* 10(4). 5–27.
- De Pelsmacker Patrick & Maggie Geuens. 1997. Emotional appeals and information cues in Belgian magazine advertisements. *International Journal of Advertising* 16. 123–147.

- De Pelsmacker Patrick & Maggie Geuens. 1999. The advertising effectiveness of different levels of intensity of humor and warmth and the moderating role of top of mind awareness and degree of product use. *Journal of Marketing Communications* 5(3). 113–129.
- De Pelsmacker Patrick, Maggie Geuens & Pascal Anckaert. 2002a. Media context and advertising effectiveness: The role of context appreciation and context/ad similarity. *Journal of Advertising* 31(2). 49–61.
- De Pelsmacker Patrick, D. Maison & Maggie Geuens. 2002b. Emotional and rational advertising messages in positive and negative polish media contexts. *Advances in International Marketing* 12. 121–135.
- Deleersnyder Barbara, Marnik G. Dekimpe, Jan-Benedict E. M. Steenkamp & Peter S. H. Leeflang. 2009. The role of national culture in advertising's sensitivity to business cycles: An investigation across all continents. *Journal of Marketing Research* 46(5). 623–636.
- Duncan Calvin P. & James E. Nelson. 1985. Effects of humor in a radio advertising experiment. *Journal of Advertising* 14(2). 33–64.
- Economou Marina, Michael Madianos, Lily E. Peppou, Athanasios Patelakis & Costas N. Stefanis. 2013a. Major depression in the era of economic crisis: A replication of a cross-sectional study across Greece. *Journal of Affective Disorders* 145(3). 308–314.
- Economou Marina, Michael Madianos, Lily Evangelia Peppou, Kyriakos Souliotis, Athanasios Patelakis & Costas Stefanis. 2014. Cognitive social capital and mental illness during economic crisis: A nationwide population-based study in Greece, *Social Science & Medicine* 100. 141–147.
- Economou, Marina, Michael Madianos, Lily Evangelia Peppou, Christos Theleritis, Athanasios Patelakis & Costas Stefanis. 2013b. Suicidal ideation and reported suicide attempts in Greece during the economic crisis. *World Psychiatry* 12(1). 53–59.
- Eisend Martin 2009. A meta-analysis of humor in advertising'. *Journal of the Academy of Marketing Science* 37(2). 191–203.
- Elpers Woltman, Josephine L. C. M., Michel Wedel & Rik G. M. Pieters. 2003. Why do consumers stop viewing television commercials? Two experiments on the influence of moment-to-moment entertainment and information value. *Journal of Marketing Research* 40 (November). 437–453.
- Fennis Bob M. & Arnold B. Bakker. 2001. Stay tuned: We will be back right after these messages: Need to evaluate moderates the transfer of irritation in advertising. *Journal of Advertising* 30(3). 15–25.
- Freiheit Stacy R., James C. Overholser & Kim L. Lehnert. 1998. The association between humor and depression in adolescent psychiatric inpatients and high school students. *Journal of Adolescent Research* 13(1). 32–48.
- Führ Martin. 2002. Coping humor in early adolescence. *International Journal of Humor Research* 15(3). 283–304.
- Geuens Maggie, De Pelsmacker Patrick. 1998. Feelings evoked by warm, erotic, humorous or non-emotional print advertisements for alcoholic beverages. *Academy of Marketing Science Review* 1. 1–31.
- Goldberg Marvin E. & Gerald J. Gorn. 1987. Happy and sad TV programs: How they affect reactions to commercials. *Journal of Consumer Research* 14(December). 387–403.
- Goldman-Mellor, Sidra J., Katherine B. Saxton & Ralph C. Catalano. 2010. Economic contraction and mental health: A review of the evidence, 1990–2009. *International Journal of Mental Health* 39(2). 6–31.
- Gould John Dennis. 1972. *Economic growth in history: Survey and analysis*. London: Methuen.

- Gowgiel Ashley A. & William D. McIntosh. 2010. Physical versus economic societal threat: How 9–11 and the great recession of 2008 influenced viewers' consumption of serious, sexual and violent television content. *Journal of Media Psychology* 15(3). 1–17.
- Hatzithomas Leonidas, Yorgos Zotos & Christina Boutsouki. 2011. Humor and cultural values in print advertising: A cross-cultural study. *International Marketing Review* 28(1). 57–80.
- Henman Linda D. 2001. Humor as a coping mechanism: Lessons from POWs. *International Journal of Humor Research* 14(1). 55–82.
- Herzog Thomas R. & David A. Larwin. 1988. The appreciation of humor in captioned cartoons. *The Journal of Psychology* 122(6). 597–607.
- International Monetary Fund. 2007. IMF Executive Board Concludes 2006 Article IV Consultation with Greece. No. 07/10, January. <http://www.imf.org/external/np/sec/pn/2007/pn0710.htm> (accessed on December 1, 2013).
- International Monetary Fund. 2013a. IMF Executive Board Concludes 2013 Article IV Consultation with Greece. No. 13/64. June. <http://www.imf.org/external/np/sec/pn/2013/pn1364.htm> (accessed December 1, 2013).
- International Monetary Fund. 2013b. Greece: Staff Report for the 2013 Article IV Consultation, IMF Staff Country Report. No. 13/154. June. <http://www.imf.org/external/pubs/ft/scr/2013/cr13154.pdf> (accessed December 1, 2013).
- Izard Carroll. 1977. *Human emotions*. New York: Plenum Press.
- Kindleberger Charles P. & Robert Z. Aliber. 2011. *Manias, panics and crashes: A history of financial crises*. London: Palgrave Macmillan.
- Kleinke, Chris L. 1988. The Depression Coping Questionnaire. *Journal of Clinical Psychology* 44(4). 516–526.
- Kuiper Nicholas A. & Rod A. Martin. 1993. Humor and self-concept. *International Journal of Humor Research* 6(3). 251–270.
- Kuiper Nicholas A., Rod A. Martin. & K. A. Dance. 1992. Sense of humor and enhanced quality of life. *Personality and Individual Differences* 13(12). 1273–1283.
- Kuiper Nicholas A., Rod A. Martin, J. Olinger, S. Kazarian & J. Jetté. 1998. Sense of humor, self-concept, and psychological well-being in psychiatric inpatients. *International Journal of Humor Research* 11(4). 357–381.
- Lamey Lien, Barbara Deleersnyder, Marnik G. Dekimpe & Jan-Benedict E. M. Steenkamp. 2007. How business cycles contribute to private-label success: Evidence from the United States and Europe. *Journal of Marketing* 71(1). 1–15.
- Madden, Thomas J. & Marc G. Weinberger. 1982. The effects of humor on attention in magazine advertising. *Journal of Advertising* 11(3). 8–14.
- Marketing Research. 2009. Humor is up 4 percent. *Marketing Research* 21(2). 5.
- Martin Rod A., Nicholas A. Kuiper, L. Joan Olinger & Kathryn A. Dance. 1993. Humor, coping with stress, self-concept, and psychological well-being. *Humor: International Journal of Humor Research* 6(4). 89–104.
- Martin Rod A., Patricia Puhlik-Doris, Gwen Larsen, Jeanette Gray & Kelly Weir. 2003. Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality* 37. 48–75.
- McGraw A. Peter & Caleb Warren. 2010. Benign violations making immoral behavior funny. *Psychological Science* 21(8). 1141–1149.
- Mukherjee Ashesh & Laurette Dubé. 2012. Mixing emotions: The use of humor in fear advertising. *Journal of Consumer Behaviour* 11(2). 147–161.

- Neff Jack. 2008. Recession can be a marketer's friend: From soap operas to iPods: History suggests slumps spawn innovation. *Advertising Age* 79(12). 26.
- Nezlek, John B. & Peter Derks. 2001. Use of humor as a coping mechanism, psychological adjustment, and social interaction. *International Journal of Humor Research* 14(4). 395–413.
- Nielsen Company. 2012. Economy-Proof Ads Funny Beats Frugal in Advertising Media and Entertainment. Global Consumer Insights. Nielsen. Available at <http://www.nielsen.com/us/en/insights/news/2012/economy-proof-ads-funny-beats-frugal-in-advertising.html> (accessed September 19, 2014).
- Nunnally Jum. 1978. *Psychometric theory*, 2nd edn. New York: McGraw-Hill.
- Ostamo Aini, Eero Lahelma & Jouko Lönnqvist. 2001. Transitions of employment status among suicide attempters during a severe economic recession. *Social Science and Medicine* 52 (11). 1741–1750.
- Percy Larry & Elliott Richard. 2005. *Strategic advertising management*, 2nd edn. New York: Oxford University Press.
- Pettijohn Terry F. & Brian J. Jungeberg. 2004. Playboy playmate curves: Changes in facial and body feature preferences across social and economic conditions. *Personality and Social Psychology Bulletin* 30(9). 1186–1197.
- Pettijohn Terry F. & Abraham Tesser. 1999. Popularity in environmental context: Facial feature assessment of American movie actresses. *Media Psychology* 1(3). 229–247.
- Pettijohn Terry F. 2003. Relationships between US social and economic hard times and popular motion picture actor gender, actor age, and movie genre preferences. *North American Journal of Psychology* 5(1). 61–66.
- Plutchik Robert. 1980. *Emotion: A psychoevolutionary synthesis*. New York: Harper & Row.
- Pollay Richard. 1985. The subsiding sizzle: A descriptive history of print advertising, 1900–1980. *The Journal of Marketing* 49(3). 24–37.
- Poncin Ingrid & Christian Derbaix. 2009. Commercials as context for other commercials. *Journal of Advertising* 38(3). 33–50.
- Potts Richard & Dawn Sanchez. 1994. Television viewing and depression: No news is good news. *Journal of Broadcasting & Electronic Media* 38(1). 79–90.
- Reinhard Keith. 2001. *Now Is the Time*. Adweek New England Edition, 38(41). 12.
- Rothstein Jesse. 2011. *Unemployment insurance and job search in the Great recession*. (No. w17534). National Bureau of Economic Research.
- Sargent-Cox Kerry, Peter Butterworth & Kaarin J. Anstey. 2011. The global financial crisis and psychological health in a sample of Australian older adults: A longitudinal study. *Social Science & Medicine* 73(7). 1105–1112.
- Scharrer Erica, Andrea Bergstrom, Angela Paradise & Qianqing Ren. 2006. Laughing to keep from crying: Humor and aggression in television commercial content. *Journal of Broadcasting & Electronic Media* 50(4). 615–634.
- Solantaus Tytti, Jenni Leinonen & Raija-Leena Punamäki. 2004. Children's mental health in times of economic recession: Replication and extension of the family economic stress model in Finland. *Developmental Psychology* 40(3). 412–429.
- Speck Paul Sergi. 1991. The humorous message taxonomy: A framework for the study of humorous ads. *Current Issues & Research in Advertising* 13(1). 1–44.
- Spielberger Charles D. & Sumner J. Sydeman. 1994. State-trait anxiety inventory and state-trait anger expression inventory. In *The use of psychological testing for treatment planning and outcome assessment*, 292–321. Hillsdale, NJ & England: [Lawrence Erlbaum Associates](#), Inc, xv, 637 pp.

- Srinivasan Raji & Garry L. Lilien. 2009. *An empirical investigation of R&D, advertising and firm performance in recessions*. Working Paper.
- Starrin Bengt, Ulla Rantakeisu & Curt Hagquist. 1997. In the wake of recession – economic hardship, shame and social disintegration. *Scandinavian journal of work, environment & health* 23(4). 47–54.
- Stiglitz Joseph. 1999. Must financial crises be this frequent and this painful? The Asian financial crisis: Causes, contagion and consequences. *Policy Options* 2. 386.
- Stocking S. Holly, Barry S. Sapolsky & Dolf Zillmann. 1977. Sex discrimination in prime time humor. *Journal of Broadcasting & Electronic Media* 21(4). 447–457.
- Sultanoff Steven. 1995. Levity defies gravity; Using humor in crisis situations. *Therapeutic Humor* 9(3). 1–2.
- Swani Kunal, Marc G. Weinberger & Charles S. Gulas. 2013. The impact of violent humor on advertising success: A gender perspective. *Journal of Advertising* 42(4). 308–319.
- Tellis Gerard J. & Kethan Tellis. 2009. Research on advertising in a recession. A critical review and synthesis. *Journal of Advertising Research* 49(3). 304–327.
- UN 2013. *World economic situation and prospects 2013*. New York: United Nations.
- Ünal-Karagüven M. Hülya. 2009. Psychological impact of an economic crisis: A Conservation of Resources approach. *International Journal of Stress Management* 16(3). 177–194.
- Vilaythong Alexander P., Randolph C. Arnau, David H. Rosen & Nathan Mascaro. 2003. Humor and hope: Can humor increase hope? *International Journal of Humor Research* 16(1). 79–90.
- Voon Jan P. & Jan Cham Voon. 2012. A structural model of consumption: An application to China during the global financial crisis. *The Journal of Socio-Economics* 41(3). 284–288.
- Vranica Suzanne. 2009. Bud to strike note of pragmatism. *Wall Street Journal. Eastern Edition* 253(13). B6.
- Wong Elaine. 2013. Boston market goes for the funny Bone. *Adweek* (March).
- Yelkur Rama, Chuck Tomkovick, Ashley Hofer & Daniel Rozumalski. 2013. Super Bowl ad likeability: Enduring and emerging predictors. *Journal of Marketing Communications* 19(1). 58–80.
- Yoon Hye Jin & Spencer F. Tinkham. 2013. Humorous threat persuasion in advertising: The effects of humor, threat intensity, and issue involvement. *Journal of Advertising* 42(1). 30–41.
- Zhang Yong. 1996. Responses to humorous advertising: The moderating effect of need for cognition. *Journal of Advertising* 25(1). 15–32.
- Zillmann Dolf & Jennings Bryant. 1985. Affect, mood, and emotion as determinants of selective exposure. In D. Zillmann & J. Bryant (eds.), *Selective exposure to communication*, 157–190. Hillsdale, NJ: [Lawrence Erlbaum Associates](#).
- Zillmann Dolf. 1988. Mood management: Using entertainment to full advantage. In L. Donohew, H. E. Sypher & E. T. Higgins (eds.), *Communication, social cognition, and affect*, 147–171. Hillsdale, NJ: Erlbaum.
- Zmuda Natalie. 2008. How to market through recession jitters. *Advertising Age* 79(12). 27.

## Bionotes

### Leonidas Hatzithomas

Leonidas Hatzithomas is currently a Lecturer in Advertising at the Department of Business Administration, University of Macedonia, Greece. He holds a PhD in “Advertising”, from

Aristotle University of Thessaloniki. His research interests include humor in advertising, advertising effectiveness, social media communications and consumer behavior. He has published his work among others in the *International Marketing Review*, *International Journal of Advertising*, *Journal of Marketing Communications*, *Journal of Customer Behavior*, *Journal of Managerial Issues*, *Journal of Current Issues and Research in Advertising* and *Journal of Applied Business Research*.

#### **Christina Boutsouki**

Christina Boutsouki is currently an Associate Professor in Marketing at the Economics Department, Aristotle University of Thessaloniki, Greece. She holds a BSc in Mathematics (Aristotle University of Thessaloniki) an MSc in Operational Research (Lancaster University) and a PhD in Retail Marketing (Manchester Metropolitan University). Her research interests lie within the areas of Advertising and Retailing. In particular, her recent research focuses on Advertising Effectiveness, Humorous Advertising, Store and Web Atmospherics, Social Media Communication, Consumer Engagement and Neuromarketing. She has published her work among others in the *International Journal of Research & Distribution Management*, *Journal of Current Issues and Research in Advertising*, *International Marketing Review*, *Journal of Marketing Communications*, *Journal of Internet Marketing and Advertising*, *International Journal of Advertising*.

#### **Yorgos Zotos**

Yorgos Zotos is Professor at the Department of Communication and Internet Studies, Cyprus University of Technology. He holds a PhD from Aristotle University Greece. He has published articles in various refereed journals, among them, *Journal of Business Ethics*, *International Marketing Review*, *European Journal of Marketing*, *Journal of Euromarketing*, *Journal of Current Issues and Research in Advertising*, *Journal of International Consumer Marketing* and *International Journal of Retail and Distribution Management*. He is currently guest-editor (2014-2016) to the *International Journal of Advertising*, for the Special Issue: Gender Advertising.