A typology of consumers based on money attitudes after major recession

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Published version

HAMPSON, Daniel, GRIMES, Anthony, BANISTER, Emma and MCGOLDRICK, Peter (2018). A typology of consumers based on money attitudes after major recession. Journal of Business Research, 91, 159-168.

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ABSTRACT

Since the Great Recession, not all US consumers have felt the financial benefits of the sustained period of macroeconomic expansion. While some research demonstrates renewed consumer confidence and financial security among households, other studies highlight economic vulnerability and higher levels of distress relative to before the 2007/09 crisis. This study examines empirically the heterogeneity of consumers' money attitudes in the post-recession economy. Based on a nationally representative sample of US consumers (n=1202), we identify four post-recession consumer types, distinguished by important attitudinal and behavioral differences: "*Flourishing Frugal*"; "*Comfortable Cautious*"; "*Financial Middle*"; and, "*Financially Distressed*". While the prior studies offer broad strategic advice, this study indicates that marketers need differentiated strategies to target most effectively and deliver value to different consumer clusters.

Keywords: Recession; economic recovery; cluster-based segmentation; consumer confidence; frugality; perceived financial security.

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1 Introduction

Economists label the period between 1982 and 2007 as “the Great Moderation” (Davis & Kahn, 2008), a time of almost uninterrupted macroeconomic stability and prosperity in the US. During this period, marketers guided consumers by defining the ‘good life’ through consumerism, with consumers often living beyond their means (Quelch & Jocz, 2009).

Then the Great Recession arrived and consumer excess gave way to mass frugality. Between December 2007 and June 2009, the US GDP declined by 4.3%, marking the most severe US recession since World War II (National Bureau of Economic Research: NBER, 2017). The unemployment rate increased from 4.5% in February 2007 to 10.0% in October 2009 (Bureau of Labor Statistics: BLS, 2017a), signifying “a labor market disaster of proportions not seen since the Great Depression” (Redbird & Grusky, 2016, p.197). Consumers became thriftier, reflected by increased price consciousness (Steenkamp & Maydeu-Olivares, 2015), greater use of private-labels (Hampson & McGoldrick, 2013), patronizing discount retailers (Lamey, 2014), and fewer purchases of status-rich goods (Kamakura & Du, 2012).

Since July 2009, the US economy has experienced sustained expansion (NBER, 2017), and unemployment has been consistently at or below 5% since September 2015 (BLS, 2017a). Despite the upswing in macroeconomic performance, consumers have remained frugal (Pistaferri, 2016), as for decades after the Great Depression (1929-1939) (Schewe & Meredith, 2004). Consistent with predictions of a post-recession “age of thrift” (Piercy *et al.,* 2010, p.3), by

February 2017, the personal savings ratio (5.6%) was still almost 300% higher than in July 2005 (Bureau of Economic Analysis, 2017).

Slow consumption growth has implications for many businesses. For discounters and economy brands, prevailing consumer frugality is an opportunity to build market share. For most other brands however, it threatens the salience of non-price value propositions. Slow recovery in consumer expenditure is part of a vicious circle in the labor market that "will be a feature of the US economy for many years" (Card & Mas, 2017, p.6).

Seeking to understand this slow recovery in consumer spending, analysts emphasize issues related to adverse consumer confidence, income insecurity, and stricter credit access (Pistaferri, 2016). Marketing scholars conceptualize enduring frugal consumer behavior as more of a lifestyle than a financial choice. For example, Piercy *et al.* (2010) emphasize affective drivers of consumer frugality; consumers derive feelings of a "smart-shopper" buzz when securing bargains but they may perceive expenditure on luxury items as shameful. Such broad explanations of frugal consumer behavior risk ignoring diversity in consumers' financial situations. To our knowledge, no research yet explores differences among consumer segments post-recession. This is a significant research gap because macroeconomic performance affects households and their responses in different ways, thus requiring different marketing strategies (e.g., Quelch & Jocz, 2009).

We contribute to the literature by developing a typology of consumers, classifying them according to three money-related constructs: consumer confidence, perceived financial security, and consumer financial distress. We validate and test the typology using a model of frugal consumer behavior comprising five antecedent constructs (i.e., smart-shopper pride, consumer financial guilt, propensity to plan for money, consumer impulsiveness, and need for status).

The organization of the paper is as follows: Section 2 develops the research propositions; section 3 describes the methodology; section 4 presents the results; section 5 explains the major theoretical and practitioner implications; and, section 6 suggests opportunities for future research.

2 Consumer typologies

Consumer typologies classify heterogeneous populations into meaningful and distinct subgroups (Lee *et al.*, 2013). From a marketing perspective, consumer typologies provide a basis for more precise and effective segmentation, targeting, and positioning strategies (Yankelovich & Meer, 2006).

Recessions have variable effects on different consumer groups. During the Great Recession, many experienced a reduction in financial well-being, yet a minority experienced unemployment and financial distress (O'Loughlin *et al.*, 2017). Some consumers even retained a positive financial outlook throughout the crisis (Quelch & Jocz, 2009). In September 2008, mid-way through the Great Recession, 47% of US consumers felt financially worse off than a year earlier, 20% felt no change, and 33% actually felt better off (University of Michigan, 2018). Although many brands sought ways to provide greater economic value during the Great Recession, some fast-moving consumer goods (FMCG) brands and luxury super-brands raised prices (Nunes *et al.*, 2011; Piercy *et al.*, 2010). Focusing only on consumers seeking to reduce financial outlays risks alienating significant, high value, minority clusters (Hampson & McGoldrick, 2013).

The existing recession-focused research uses primarily behavioral constructs as bases for consumer typologies. For example, Hampson and McGoldrick (2013) use behavioral adaptations (e.g., store disloyalty, store brand usage and less ethical consumption) to develop a four-cluster consumer typology during the 2008/09 recession (i.e., *Maximum Adaptors*; *Minimum Changers*; *Eco-Crunchers*; *Caring Thrifties*). This approach identifies important differences in how consumers adapt to economic contractions but offers limited insight into underlying motives (Yankelovich & Meer, 2006). In contrast, attitude-based typologies can offer sounder bases for understanding the differences in the predictive powers of salient variables on managerially-relevant behaviors (Lee *et al.*, 2013).

2.1 Bases for segmenting consumers post-recession

With our focus on economic conditions, we use money attitudes as the bases for developing the consumer typology. Researchers distinguish between consumers' attitudes toward the broad macroeconomic environment and attitudes toward their personal finances (e.g., Kamakura & Du, 2012). Even consumers unaffected personally by economic contractions might make significant expenditure adaptations in response to shifting societal expectations and norms during an economic downswing (Kamakura & Du, 2012). To measure consumer attitudes toward the national economy we use *consumer confidence*. With regard to individuals' attitudes toward personal finances, Duh (2016) distinguishes between conservative money attitudes (cognitive evaluations regarding personal financial security and ability to budget for future needs) and affective money attitudes (positive/negative feelings evoked by beliefs about personal financial-well-being). Reflecting themes in contemporary research on money attitudes, we use *perceived financial security* to reflect the conservative money attitudes component and *consumer financial distress* to capture the affective component of money attitudes.

Consumer confidence is a subjective measure of customers' expectations of positive or negative changes in the economic climate (Hunneman *et al.*, 2015). Consumer confidence indices explain changes in economic activity, including near-term consumer expenditure and savings growth, even when controlling for more objective economic indicators such as jobs, inflation, and money supply (e.g., Dees & Brinca, 2013).

Perceived financial security reflects individuals' subjective judgments of their own economic well-being (Haines *et al.,* 2009). Individuals' evaluations may include job security, ability to pay bills and debts, and resources to cover unexpected costs (Logan *et al*., 2013). Financially insecure households typically become more careful with money and focus on precautionary savings to mitigate future income loss (Prawitz *et al.,* 2013).

Consumer financial distress is a negative affective construct, arising when an individual appraises a (potential) change in their financial situation as being harmful and/or threatening (Prawitz *et al.,* 2013). Distress is associated with negative feelings, including hopelessness, anger, irritation, and difficulties relaxing or staying calm (Henry & Crawford, 2005).

These different bases for segmentation highlight the need to recognize the heterogeneity in economic situations of post-recession consumers. In the context of wage growth among higher income groups (Redbird & Grusky, 2016), some consumers are confident about their finances, job security, and the general economy (Magni *et al*., 2016). Simultaneously, other citizens experience continuing financial stress, which can result in economic alienation, with self-efficacy and self-confidence tested severely (O'Loughlin *et al.,* 2017). Among US households, Shoss (2017) identifies a growing sense of economic and psychological distress associated with job insecurity and perceived economic vulnerability.

Since September 2015, US unemployment has been at or below 5% (BLS, 2017a); however, other indicators present a more nuanced and pessimistic account of the situation. Specifically, there have been increases in both long-term unemployment (for over six months;

BLS, 2017b) and the number of discouraged workers (jobless adults who give up seeking work; BLS, 2017c), and a decline in labor force participation (BLS, 2017d). This consumer heterogeneity on money-related constructs leads to our first research proposition:

Research Proposition 1: *Consumer confidence, perceived financial security, and consumer financial distress are meaningful bases for classifying post-recession consumers.*

2.2 Cluster validation

Effective consumer typologies should demonstrate that different segments have unique consumption-relevant attitudes and behaviors (Pires *et al*., 2011). We focus on the drivers of frugal consumer behavior (FCB), that is, "the degree to which consumers are both restrained in acquiring and in resourcefully using economic goods and services to achieve long-term goals" (Lastovicka *et al.*, 1999, p.88). FCB manifests in various forms, including discipline in spending, resourceful product usage, and not spending impulsively (Shoham & Brenčič, 2004). In contrast to the three clustering constructs that relate more to financial wellness, we identify five antecedents of FCB from the literature that relate to spending and consumption behaviors:

- *Consumer financial guilt* is a negative emotion associated with personal accountability for doing a "bad thing" (Niedenthal *et al.*, 1994, p.587), perhaps detrimental to personal financial well-being (Dahl *et al.*, 2003). Negative emotions such as guilt can undermine well-being and self-esteem, encouraging people to avoid actions that might create negative emotions, leading to FCB in times of macroeconomic uncertainty. Piercy *et al.* (2010) add that consumer frugality after a recession relates to a need to avoid feeling luxury shame.
- *Smart-shopper pride* occurs when feelings of accomplishment, even winning, accompany perceptions of obtaining value for money, leading to self-affirmation (Garretson & Burton,

2003). Consistent with evidence that some consumers derive pleasure from being frugal (Goldsmith *et al.*, 2014), recession-induced thrift associates with smart-shopper pride (Piercy *et al.*, 2010). Empirical research links smart-shopper pride to behaviors that are indicative of frugality, including coupon usage (Kim & Yi, 2016).

- *Propensity to plan for money* refers to an inclination to set financial goals and plan actions to achieve them. These include frequent budgeting, monitoring bank balances, and other money-related information (Lynch *et al.*, 2010). Consumers who are mindful of financial matters exhibit greater purchasing prudence. Evidence demonstrates that frugality correlates significantly with propensity to plan for money across multiple samples (Lynch *et al*., 2010).
- *Need for status* describes a motivational process of individuals striving to improve their social standing (Eastman *et al.*, 1999, p.42). People use luxury and conspicuous consumption to signal status (Eastman *et al.*, 1999), which typically has a negative relationship with consumer frugality (Goldsmith *et al.*, 2014).
- *Consumer impulsiveness* involves acting on urges to buy without prior intention or planning, regardless of whether purchases are consistent with longer-term financial goals (Beatty & Ferrell, 1998). Consumer impulsiveness often involves a decline in spending self-control, thus associates negatively with ability to exercise frugality (Haws *et al*., 2012).

While most consumers have remained frugal since the recession, different factors may drive such behavior. Flatters and Willmott (2009, p.3) use the term “discretionary thrift” to describe enduring frugality among post-recession consumers who are relatively secure financially. For these consumers, FCB may be a lifestyle choice rather than a financial imperative (Flatters & Willmott, 2009; Piercy *et al.*, 2010). Goldsmith *et al.* (2014) discuss the enduring influence on frugality of previously negative economic conditions as “constrained frugality” (p.176).

Our second research proposition draws on these antecedents, focusing on consumers' exhibited differences in their reasons for FCB:

Research Proposition 2: *Segments of post-recession consumers differ with regard to the antecedents of their frugal consumer behavior*.

3 Methodology

3.1 Sample

Qualtrics Panel Management recruited an online survey sample, with quotas on gender, age (18−75), and main regions, to achieve a broadly representative US sample (within 1.1 percentage points on sub-quotas). Prior screening identified the main shoppers, which was a requisite for participation. Embedded filters for non-attentive respondents terminated the survey and rejected such cases, using detection measures to increase validity and statistical power (Oppenheimer *et al.*, 2009). Qualtrics undertook the initial data quality checks for fast responding, providing an initial sample of 1,254. Further data cleaning, including the elimination of cases with clear inconsistencies or excessive straight-line clicking, left a sample of 1,202. Table 1 summarizes the sample characteristics. The survey took place in September 2015, when the unemployment rate was at a seven-year low of 5% (BLS, 2017a).

[Table 1 about here]

3.2 Measures

Existing scales with evidence of reliability and construct validity measure the three clustering constructs. Four items from Hunneman *et al*. (2015) measure consumer confidence (1=extremely negative; 9=extremely positive). Three items with adaptations from Henry and Crawford's (2005) Depression Anxiety Stress Scale (1=disagree strongly, 7=agree strongly) measure consumer financial distress (i.e., *"My present financial situation makes me…").* Three items measure perceived financial security (1=extremely insecure; 9=extremely secure). Each starts: "*indicate how insecure or secure you are about the following…"* followed by three statements from the Logan *et al.* (2013) financial security scale, which relates to ability to pay for living costs and unexpected bills.

Seven point Likert scales measure six constructs: FCB (3 items: Lastovika *et al.*, 1999); consumer financial guilt (3 items: Cotte *et al.* (2005), with adaptations reflecting the context "*In the current economic climate, spending on major items makes me feel…*); propensity to plan for money (3 items: Lynch *et al.*, 2010); need for status (3 items: Eastman *et al.*, 1999); consumer impulsiveness (3 items: Beatty & Ferrell, 1998); smart-shopper pride (3 items: Burton *et al.*, 1998). Table 2 includes descriptive statistics and correlations, while the Appendix provides the scale items, loadings, average variance extracted (AVE), and reliabilities.

Consistent with previous research on consumer money attitudes (e.g., Xiao *et al.*, 2014), several demographic and socioeconomic variables help to profile the clusters (Table 3) and serve as control variables in regression analyses (Table 4). These include categorical variables for gender (male/female), current employment status (six categories) and highest level of education (six categories). Tables 1 and 3 report reduced forms of the latter two variables for parsimony; for regression analyses, we used dummy variables for employment status (0=not employed full-time, 1=employed full-time) and education level (0=no college degree, 1=college degree). Ordinal scales measured age (six categories), household annual income before tax (thirteen categories), and financial dependents (nine categories). For descriptive statistics and correlations (Table 2), and regression analyses (Table 4), we used scale mid-points for age and income.

[Table 2 about here]

3.3 Common method bias

We followed several procedures to limit common method bias (Podsakoff *et al.,* 2012). The questionnaire design includes different scale types and other interruptions to repeated response patterns. As a post-survey filter for "straight line clickers", counts of same answers on each scale-type enabled the rejection of cases demonstrating unacceptable levels. Exploratory factor analysis shows a single factor accounting for 20.4% of variance, which is far below the 50% threshold for CMB concerns (Harman, 1976). Confirmatory factor model fit remains similar after the inclusion of a common latent factor (model with common latent factor: χ^2 = 1293.87, d.f. = 312; model without common latent factor: χ^2 = 1293.98, d.f. = 313; $\Delta\ \chi^2$ = .11, p = .74), which is indicative that common method bias is not an issue (Podsakoff *et al.,* 2012). We compared standardized regression weights between the two models. None of the differences exceeds .20, again indicating that common method bias is not a problem in these data (Hung *et al.,* 2017).

3.4 Measurement model fit and construct validity

We tested the fit of the items measuring the three money-related constructs and six constructs in the FCB model, then we tested the scales for convergent and discriminant validity. The confirmatory factor analysis (maximum likelihood procedure) results support the measurement model. The fit of the model is satisfactory: Ratio of chi-square to degrees of freedom (χ^2/d.f. = 4.13); Absolute fit measures (RMSEA = .05; SRMR = .055); Incremental fit measures (NFI = .95; CFI = .96). The results support convergent validity: the smallest standardized factor loading of any item is .60 (Appendix), which is well above the .50 threshold (Hair *et al.,* 2010). The AVEs range from .57 (FCB) to .87 (consumer financial guilt), and reliability alphas all exceed .70 (Appendix). The scales demonstrate discriminant validity according to Fornell and Larker's (1981) criteria: inter-construct correlations range from .01 (e.g., FCB ↔ consumer confidence) to .61 (consumer impulsiveness ↔ need for status); the square of the correlation between each pair of constructs is lower than each associated construct's AVE.

4 Results

4.1 Cluster analysis

To develop the consumer typology, we used a two-stage procedure (Punj & Stewart, 1983). Hierarchical clustering identifies the appropriate number of clusters and seed points for the cluster centers; K-means clustering, more amenable to analyzing samples larger than 400, enables fine-tuning of clusters (Hair *et al.*, 2010). Initially, we used Ward's method and squared Euclidean measure to compute the hierarchical clustering, entering variables in standardized form. The agglomeration schedule assists researchers in selecting an appropriate number of clusters; when a disproportionately large increase occurs in coefficients of two consecutive stages, further merging of clusters results in excessive heterogeneity within clusters (Hair *et al.*, 2010). An increase in the coefficient values of 10.49 percentage points between the four and three cluster solutions, compared to an average increase of 2.18 percentage points for the previous five stages, suggests that a four-cluster solution is ideal.

Consistent with Ketchen and Shook (1996), we tested the reliability of the cluster solution in three ways. First, the variance inflation factor (VIF) for each construct ranges from 1.05 to 1.37, indicating that multicollinearity is not a problem. Second, we performed the cluster analysis multiple times, with unstandardized data and different clustering algorithms. Third, we repeated the analysis on two random sub-samples of 50% (each n=601). The four-cluster solution is consistent across these tests, suggesting a reliable solution (Ketchen & Shook, 1996).

The second stage deploys non-hierarchical (K-means) cluster analysis to develop a four-cluster solution using seed points from the hierarchical clustering (Furse *et al.*, 1984). The cluster solution in Table 3 derives from the full sample; however, the split sample validation shows very similar results from the sub-sets of the data, indicating a reliable cluster analysis (Ketchen & Shook, 1996). Confirmatory factor analysis (see 3.4) for each cluster also shows satisfactory results. ANOVA tests the significance of the differences between the clusters based on scale means; for the constructs in the cluster analysis and regression models, chi-square tests the differences in demographic and socioeconomic characteristics.

[Table 3 around here]

The inter-cluster differences among the FCB levels are significant ($F=3.76$, $p<.05$), although clusters exhibit quite similar levels of FCB. This notable finding reflects the normalization of thrift since the recession, in contrast with the previous culture of indebtedness. Four antecedent variables relate significantly to FCB: propensity to plan for money ($\beta=.37$, $p < .001$); smart-shopper pride ($\beta=.21$, $p < .001$); consumer impulsiveness ($\beta=-.15$, $p<.001$); and consumer financial guilt ($\beta=.12$, $p<.001$). Contrary to expectations, need for status does not relate significantly to FCB.

We now explore *why* different consumer clusters are frugal post-recession. Scheffe post-hoc analyses pinpoint the differences among specific clusters. We include chi-square tests between clusters based on the demographic and socioeconomic variables. We refer to the results of one-sample t-tests when reporting directionality. Finally, we report the regression analyses for the FCB model for each cluster (Table 4).

[Table 4 around here]

4.2 Cluster 1: Flourishing Frugal (31.5% of sample)

This largest cluster shows the highest level of perceived financial security and the second most positive level of consumer confidence. Containing the highest earners among the clusters, with a mean annual income of $78,100 (SD = $40,800), these consumers do not feel financially distressed. This cluster has the highest average age (M = 52.60, SD = 15.12), greatest proportion of college graduates and retirees, and lowest incidence of unemployment. It also has the greatest gender differential with 38% of male respondents and 25.6% of females. The cluster's demography is consistent with the literature showing that being well-educated and male associates with greater financial wellness (e.g., Netemeyer *et al.*, 2017). Despite gradual reductions over the last two decades, there remains a significant gender wage gap in the US, with a lower incidence of females than males in senior management roles (Addison *et al*., 2014).

Given their relatively strong financial situation, these respondents have less financial imperative to be frugal than those in the other clusters. Regression analysis indicates that the primary motivators of their frugality are intrinsic rewards of such behavior, with smart-shopper pride associating significantly and positively with FCB (β=.20, p<.001). The absence of economic need for these respondents to be frugal resonates with the concept of "discretionary thrift", which is an anticipated hallmark of the post-Great Recession consumer (Flatters & Willmott, 2009; Piercy *et al.,* 2010). As the two hedonic factors exert a negative influence on FCB (consumer impulsiveness: β = -.19, p<.001; need for status: β = -.14, p < .01), consumers in this cluster retain some appetite for non-frugal purchases.

Given their relative financial prosperity yet enduring frugality, we label this cluster the *Flourishing Frugal*.

4.3 Cluster 2: Comfortable Cautious (27.5%)

This cluster demonstrates the highest level of consumer confidence and the second highest level of perceived financial security. These consumers have a mean annual income of approximately $59,000 (SD = $35,500), second only to the *Flourishing Frugal*. Given their relatively healthy financial position, it is perhaps surprising that they report higher degrees of financial distress than the lower income and less financially secure cluster 3. This possibly reflects that they have significantly more financial dependents than cluster 3; previous studies note that the number of financial dependents is associated negatively with perceived financial health (Xiao *et al.,* 2014). In contrast to *Flourishing Frugals*, the distinctive demographic characteristics of this youngest cluster (M=41.7, SD=15.0), with the highest proportion of females, are associated with lower financial well-being (Netemeyer *et al.,* 2017). Furthermore, middle-income consumers are more prone to money-related stress issues such as problem debts, compared with lower and higher income consumers (Hodson *et al.,* 2014).

Notably from the regression analysis, this is the only cluster where consumer financial guilt (β =.24, p<.001) and income (β = -.18, p<.01) exert a significant effect on FCB. Guilt emerges as a powerful emotion, when feeling responsible for and having control over a violation of a personal goal or standard. For these consumers, their greater tendency toward non-essential, hedonic consumption practices (i.e., impulsiveness and need for status) probably contributes to their relatively high levels of financial distress, with feelings of financial guilt emerging as a disruption mechanism (Cotte *et al.,* 2005). Propensity to plan for money (β =.46, p<.001) is also a predictor of their FCB.

Given their distinctive mix of financial attitudes, we label this cluster *Comfortable Cautious*.

4.4 Cluster 3: Financial Middle (21.0%)

This cluster scores neither lowest nor highest on any of the three cluster variables. The cluster includes the lowest percentage of respondents with a college degree (14.7%) and the second lowest income, with 30.4% earning less than $20,000 per year. They feel moderately financially secure, but less so than the *Comfortable Cautious* and *Flourishing Frugal*. These respondents have lower levels of perceived financial security and income than the *Comfortable Cautious* but report lower levels of financial distress. Notably, they tend to have less financial dependents than the *Flourishing Frugals*; thus, consumers in cluster 3 may have less financial obligations and sources of financial stress (Xiao *et al.*, 2014). Furthermore, this cluster has a lower tendency toward consumer impulsiveness and need for status, both of which relate to financial distress (Verplanken & Sato, 2011).

Unlike the *Comfortable Cautious*, these consumers are not necessarily frugal due to financial constraints (e.g., income and consumer financial guilt); regression analysis shows that smart-shopper pride (β=.32, p<.001) and propensity to plan for money (β=.30, p<.001) predict the FCB for this cluster.

Because they do not demonstrate extreme responses on any of the clustering measures, we refer to these respondents as the *Financial Middle*.

4.5 Cluster 4: Financially Distressed (20.0%)

This is the smallest cluster, demonstrating the lowest levels of perceived financial security and consumer confidence, and the highest levels of financial distress. The defining profile characteristics of this cluster relate to their challenging economic status: 36.5% of the overall sample's unemployed/inactive respondents are in this cluster, which has the lowest average annual income (M=\$39,636, SD=\$27,109); 40.5% earn less than \$20,000 per year, which is the lowest income category. The experiences of this cluster resonate with the recent studies that show ongoing economic hardship, even poverty, among many US households since the end of the Great Recession (e.g., Shoss, 2017). Low income and unemployment are associated with material deprivation, as well as low self-esteem and social exclusion, leading to psychological distress (Young, 2012). Some scholars emphasize the psychological scarring associated with previous unemployment or financial hardship. Even when individuals recover their employment status, they still consider financial risk and income insecurity (Knabe & Rätzel, 2011).

Regression analysis shows that propensity to plan for money (β=.39, p<.001) and smart-shopper pride (β=.23, p<.001) relate positively to FCB for this cluster. Consumer impulsiveness (β=-.26, p<.001) and need for status (β=-.16, p<.001) exert negative influences on FCB. This is the only cluster where employment status has a significant effect on FCB (β=-.12, p<.05) Collectively, these results indicate that despite their gloomy financial situation, these consumers might not always exercise spending self-control, especially when in full-time employment, which suggests a degree of financial vulnerability in this group (Haws *et al.*, 2012).

Given their negative economic outlook, we label this cluster the *Financially Distressed*.

5 Discussion and implications

The existing studies conceptualize post-recession consumers as cautious and frugal, despite improvements in their economic prospects. Consumers derive intrinsic feelings of smart-shopper pride in securing bargains, but shame and guilt for indulging in discretionary luxury items. Given the forecasts of enduring frugality at the end of the Great Recession, marketing scholars predicted that marketing strategies that served businesses well during the downturn (e.g., emphasizing price and expanding retailer private labels) would continue to be important long after the economy had technically left the recession (Quelch & Jocz, 2009).

At an aggregate level, the results of this study corroborate some of the broad assumptions at the end of the recession. Notably, not only financial necessity but also feelings of consumer guilt and intrinsic needs to feel ‘smart’ drive the continuing prevalence of frugal consumer behavior. However, this paper is the first to develop a post-recession consumer typology that highlights significant and managerially relevant differences among the consumer types. In Table 5 we summarize the distinctive features of each consumer segment and offer suggestions for businesses to target them.

[Table 5 around here]

The *Flourishing Frugal* are open to purchasing more discretionary, luxury products but still require assurance that they are making “smart” decisions and that they deserve the luxuries they buy. The literature on smart-shopper pride suggests that consumers need to feel like “winners”, having made efforts to achieve something worthwhile. Additionally, brands should project their products and/or services as rewards that deserving consumers have earned.

The *Comfortable Cautious* have the financial means for more expensive, discretionary purchases but businesses should consider ways to reduce inhibitory feelings of consumer guilt and financial distress. For example, brands could promote their products and/or services as well-deserved, perhaps even a normatively supported behavior, rather than something people may consider regrettable, wasteful, or shameful. Marketers can reassure consumers that they are making sound economic investments, focusing on the performance and reliability of their products, promoting resale values (e.g., cars and houses), and offering extended warranties and/or more favorable credit terms. Reducing prices may also be an option if feasible in ways that limit damage to the brand image.

The *Financial Middle* have less financial means than the *Comfortable Cautious*; however, they also exhibit lower levels of negative affect (i.e., consumer financial distress and consumer financial guilt), which might inhibit a proclivity toward more hedonic consumption. While less likely than the *Flourishing Frugal* to be able to buy expensive items, these consumers may consider less frugal consumption, where such behavior still delivers intrinsic benefits of pride through making a smart decision. However, given their inclination to plan for money, value propositions should provide both short- and long-term payment options to satisfy varying budgetary requirements.

As with the *Comfortable Cautious*, the *Financially Distressed* experience consumption guilt. However, because they are potentially vulnerable (as a result of low financial security and high levels of distress), there is an ethical imperative to protect these consumers from shopping behaviors that exacerbate their current financial problems. In line with more responsible business practices, marketers should not persuade these consumers to make unnecessary and unaffordable purchases, and they should be careful not to offer these consumers a false sense of security. Such selling practices can damage CSR reputations, undermine longer-term loyalty, and contribute to greater problems for consumers, policy makers, and businesses.

6 Limitations and future research

The single country sample potentially limits applicability of these findings in countries with very different economic circumstances. Many other large economies are also undergoing post-recession recovery; however, there is variability in the speed, strength, and stability of these recoveries, while others remain in various stages of recession. Most marketing studies of consumers in economic crises focus on the developed world. Emerging economies with different circumstances and consumer norms therefore offer interesting research opportunities.

The results develop understandings of consumer financial vulnerability, thus informing the transformative consumer research agenda (Mick *et al.,* 2012). In addition to identifying the demographic and behavioral characteristics of the *Financially Distressed*, the study reveals impacts experienced by the *Comfortable Cautious* who have the second highest incomes among our clusters. This provides further empirical support for Peñaloza and Barnhart's (2011) suggestion that people make sense of their financial situation from their own subjective position. Future research could provide nuanced, culturally informed understandings of the financial challenges experienced by consumers, in particular feelings of guilt that persist for many, despite a recovering financial position. Such knowledge would help to develop support and educational initiatives for equipping consumers with the skills and judgment necessary to make sense of complex financial situations, thus improving their financial well-being.

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Table 1
Sample structure

Characteristic		**%**	**Characteristic**		**%**
Gender:	Male	48%	***Annual income***:	< $20,000	12.3%
	Female	52%		$20,000-$39,999	25.5%
Age:	18-24	10.3%		$40,000-$69,999	30.4%
	25-54	54.2%		$70,000-$99,999	16.4%
	55-75	35.5%		$100,000+	15.5%
Education**:**	College degree	41.4%	***Major region:***	North-East	17.6%
Employment:	Full-time	40.2%		Mid-West	21.7%
	Part-time	13.1%		South	37.0%
	Unemployed/ inactive	17.4%		West	23.6%
	Retired	23.4%	***No. financial dependents***:	0	30.0%
	Student	6.1%		1	25.0%
				2-3	34.1%
Total sample	**(n)**	**1202**		4+	10.9%

Table 2
Means, standard deviations, and correlations among study variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1.Frugal consumer behavior[a]	5.54	1.06	(0.75)											
2.Consumer confidence[b]	5.46	1.63	0.01	(0.78)										
3.Perceived financial security[c]	6.12	1.99	0.06*	0.39**	(0.91)									
4.Consumer financial distress[a]	3.66	1.90	0.05	-0.22**	-0.52**	(0.93)								
5.Smart-shopper pride[a]	5.80	1.02	0.31**	0.14**	0.10**	0.11**	(0.81)							
6.Consumer financial guilt[a]	3.49	1.61	0.12**	-0.15**	-0.28**	0.55**	0.06*	(0.93)						
7.Propensity to plan for money[a]	5.82	1.08	0.46**	0.05	0.11**	0.05	0.36**	0.04	(0.85)					
8.Consumer impulsiveness[a]	3.34	1.55	-0.21**	0.27**	0.06*	0.19**	0.12**	0.18**	-0.06*	(0.86)				
9.Need for status[a]	2.96	1.76	-0.15**	0.41**	0.22**	0.09**	0.16**	0.09**	-0.04	0.61**	(0.91)			
10.Age	46.8	16.0	0.07**	-0.23**	0.14**	-0.23**	-0.18**	-0.15**	0.02	-0.32**	-0.38**	-		
11.Gender	0.52	.500	0.04	0.01	-0.14**	0.12**	0.16**	0.07*	0.05	0.04	-0.03	-0.24**	-	
12.Income ($)	58k	38k	-0.07*	0.15**	0.41**	-0.27**	-0.03	-0.13**	0.01	0.06*	0.11**	0.06*	-0.08**	-
13 Dependents (n)	1.56	1.50	0.05	0.10**	0.10**	0.07*	0.08**	0.05	0.14**	0.07*	0.15**	-0.03	-0.08**	0.17**

Notes: [a] 1=disagree strongly; 7=agree strongly
[b] 1=extremely negative; 9=extremely positive.
[c] 1=extremely insecure; 9=extremely secure.
*p < .05; ** = p < .01
Square roots of average variances extracted (AVEs) are in parentheses on the diagonal

Table 3
Non-hierarchical cluster analysis and validation for consumer typology

		Flourishing Frugal	**Comfortable Cautious**	**Financial Middle**	**Financially Distressed**	ANOVA **F-ratio**
Clustering variables						
	Consumer confidence	5.97	6.18	5.19	3.93	144.38**
	Perceived financial security	8.00	6.73	4.81	3.67	939.40**
	Consumer financial distress	1.60	4.87	3.06	5.86	1371.26**
	Cluster size	*379*	*330*	*252*	*241*	
	(Percentage of sample)	*(31.5%)*	*(27.5%)*	*(21.0%)*	*(20.0%)*	
Attitudinal and behavioral constructs						
	Frugal consumer behavior	5.59	5.57	5.50	5.63	3.76*
	Smart-shopper pride	5.81	5.94	5.47	5.92	12.29**
	Consumer financial guilt	2.45	4.11	3.15	4.42	127.93**
	Propensity to plan for money	5.96	5.84	5.43	6.00	15.97**
	Consumer impulsiveness	3.42	4.02	2.98	3.12	40.21**
	Need for status	3.02	3.85	2.58	2.29	48.93**
Profile variables						**Chi-sq.**
Age:	18-24	12.9%	36.3%	29.8%	21.0%	
	25-54	25.5%	32.4%	21.4%	20.7%	82.66**
	55-75	46.1%	17.3%	17.8%	18.7%	
Gender:	Male	38.0%	25.0%	19.4%	17.7%	21.44**
	Female	25.6%	29.8%	22.4%	22.2%	
Annual income:	<$20,000	10.1%	18.9%	30.4%	40.5%	
	$20,000-$39,999	18.3%	28.1%	26.8%	26.6%	
	$40,000-$69,999	30.4%	30.7%	20.0%	18.9%	192.47**
	$70,000-$99,999	43.7%	31.0%	14.2%	11.2%	
	$100,000+	59.7%	23.1%	12.9%	4.3%	
Financial dependents:	0	29.9%	21.9%	26.9%	21.3%	
	1	33.0%	25.3%	20.3%	21.3%	23.34**
	2-3	33.2%	30.7%	17.1%	19.0%	
	4+	27.5%	37.4%	18.3%	16.8%	
Employment:	Full-time	34.2%	36.0%	15.3%	14.5%	
	Part-time	33.8%	26.1%	22.9%	17.2%	
	Unemployed/inactive	15.9%	20.2%	27.4%	36.5%	138.59**
	Retired	43.1%	16.4%	22.4%	18.1%	
	Student	9.6%	37.0%	30.1%	23.3%	
Education:	College degree	41.2%	28.7%	14.7%	15.5%	50.58**

Notes: *p < .05; ** = p < .001

Table 4

Regression analyses (dependent variable: frugal consumer behavior)

	Full Sample	Flourishing Frugal	Comfortable Cautious	Financial Middle	Financially distressed
Smart-shopper pride	0.21*** (7.57)	0.20*** (3.85)	0.08 (1.56)	0.32*** (5.22)	0.23*** (4.10)
Consumer financial guilt	0.12*** (4.85)	0.09 (2.03)	0.24*** (5.12)	0.06 (1.12)	0.04 (0.72)
Propensity to plan for money	0.37*** (13.87)	0.31*** (6.41)	0.46*** (9.33)	0.30*** (5.12)	0.39*** (7.07)
Consumer impulsiveness	-0.15*** (-5.69)	-0.19*** (-3.38)	-0.09 (-1.35)	-0.07 (-2.71)	-0.26*** (-4.87)
Need for status	-0.06 (-1.84)	-0.14*** (-2.16)	-0.01 (-0.27)	-0.08 (-1.28)	-0.16** (-2.90)
Control variables					
Age	0.02 (0.77)	-0.06 (-0.87)	0.00 (-0.07)	0.07 (1.30)	0.08 (1.50)
Gender	-0.02 (-0.55)	-0.07 (-1.29)	0.09 (1.91)	-0.04 (-0.68)	-0.02 (-0.46)
Income	-0.04 (-1.81)	0.00 (-0.24)	-0.18*** (-3.68)	-0.05 (0.90)	-0.05 (-0.82)
Education	0.05 (1.80)	0.01 (0.26)	0.09 (2.20)	0.04 (0.75)	0.04 (0.80)
Employment status	-0.04 (-1.60)	-0.01 (-0.16)	-0.04 (-0.91)	-0.08 (-1.36)	-0.12* (-2.18)
No. financial dependents	0.03 (1.32)	0.04 (0.78)	0.06 (1.20)	-0.01 (-0.23)	0.02 (-0.36)
Model summary					
Adjusted R^2	0.29	0.20	0.37	0.32	0.43
F-value	46.08***	9.32***	17.50***	11.56***	17.41***

Notes: * $p < .05$; ** $p < .01$, *** $p < .001$

Coefficients are standardized betas, with t-values in parentheses

Table 5
Summary of clusters and appropriate marketing strategies

Clusters and defining characteristics	Potential marketing strategies
Flourishing Frugal	
-Financially secure -High consumer confidence -Highest earners, majority male -FCB associated with smart-shopper pride -Tendency toward hedonic consumption, underpinned by rejection of guilt	-Emphasize non-price value -Continue awareness advertising -Promote superior but good value brands -Discretionary items should promote benefits to personal/family welfare
Comfortable Cautious	
-Positive about personal and national financial situations -But high levels of financial distress, common among middle-income households -FCB driven by income, feelings of guilt and planning for money	-Discretionary brands should promote guilt-free gratification -Help consumers plan purchases by more transparency with prices - Promote payment options giving cautious consumers more control and flexibility -Promote risk-reducing value attributes (e.g., guarantees and returns policies)
Financial Middle	
-Moderately financially secure, low levels of stress -Don't associate discretionary spending with guilt -Despite favorable attitudes, these consumer have relatively low incomes -Smart-shopper pride a significant driver of FCB	-Continue awareness advertising -Promote discretionary purchases as a "you deserve it" treat -Position your brands as the "smart" choice, for winners.
Financially Distressed	
-The most frugal consumer cluster -Lowest financial security; -Most financially distressed -Least financially secure -Frugality might be constrained by impulsiveness and need for status -Aspects of consumer vulnerability	-Emphasize price and affordability -Promote economy/private-label brands -Relationship management should build trust -Shrink sizes to provide quantity options -Avoid aggressive cross- and up-selling tactics

Appendix

Items, loadings, average variance extracted, and scale reliabilities

	Loading	AVE	α
Frugal consumer behavior			
I discipline myself to get the most from my money	.68		
I often wait on a purchase I want so that I can save money	.79	.57	.79
There are things I resist buying today so I can save for tomorrow	.79		
Consumer confidence			
Compared with 12 months ago, how do you feel about the economic situation of the country?	.89		
What are your expectations of the economic situation of the country 12 months from now?	.92		
Compared with 12 months ago, how do you feel about the financial situation of your household?	.67	.62	.87
What are your expectations of your household's financial situation 12 months from now?	.61		
Consumer financial distress *My present financial situation makes me...*			
…upset	.94		
…agitated	.94	.87	.98
…struggle to relax	.92		
Financial security *Indicate how insecure or secure you are about the following…*			
Ability to pay rent/mortgage	.85		
Ability to pay for utilities (including electricity and phone costs)	.93	.82	.90
Your ability to pay for an unexpected medical bill of $1000	.94		
Consumer financial guilt *In the current economic climate, spending on major items makes me feel…*			
…guilty	.90		
…irresponsible	.95	.86	94
…ashamed	.94		
Smart-shopper pride *If I get a good deal when shopping, I feel…*			
…clever	.69		
…good about myself	.92	.66	.89
…proud of myself	.81		
Propensity to plan for money			
I set financial goals for what I want to achieve with my money	.79		
I decide beforehand how my money will be used in the next 1–2 months.	.91	.72	.93
I actively consider the steps I need to take to stick to my budget	.83		
Need for status			
I pay more for a product if it has status	.92		
The status of a product is relevant to me	.92	.82	.94
A product is more valuable to me if it has some snob-appeal	.87		
Consumer impulsiveness			
I often buy things spontaneously	.83		
I often buy things without thinking	.90	.75	.92
"I see it, I buy it" describes me	.86		