

Special Session Proposal: Marketing during a Recession

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Abstract

The current economic downturn continues to reach headlines around the world. Marketing managers feel an increasing pressure to justify their expenses. However, there is little research to guide these managers during a recession. To determine the best marketing response to a recession, it is crucial to understand how consumers respond to an extended period of belt tightening. In this special session we try to add to this understanding from two angles. First, using disaggregate analyses, we look at how consumers spend their (shrinking) budgets, and how they respond to government stimulus payments. Next, using more aggregate analyses, we study under what conditions spending increases during a recession makes sense, and whether advertising and price effectiveness changes over the business cycle.

Introduction

Firms are under ever increasing pressure to justify their marketing expenditures. Once considered mere costs, these expenditures are more and more treated as investments that should deliver shareholder value (e.g. Srivastava et al., 1999). This evolution towards greater accountability is reinforced in times of economic contraction, as every dollar starts to matter more. Firms facing difficult times tighten their belts, and marketing budgets are among the first to be reconsidered (McKinsey Global Survey, 2009).

The current economic downturn is no exception to this (The Financial Times, 2008). Late 2008, Toyota Motor USA, for example, announced a cut of 10% across all marketing budgets, while GM announced economizing up to \$600 million on its advertising and promotion budget up to 2012. By January 2009, 71% of all marketing managers had reduced their advertising budgets, while 77% was planning to cut their media expenditures (AdAge, 2009). These examples illustrate that as the economy cools down, managers feel even more strongly the need to reconsider their marketing investments.

The tendency to alter marketing budgets during economic downturns has been well documented in a growing stream of articles. During economic sour times, firms typically economize on research & development and new product introductions (e.g. Devinney, 1990; Axaroglou, 2003). In stark contrast, Deleersnyder et al. (2009) provide evidence of the procyclical behavior of advertising budgets at the country level, with reductions during economic contractions and increases during economic upbeat times. Similar patterns are found at the firm level by Frankenberger and Graham (2003) and at the brand level by Lamey et al. (2007).

To determine the best marketing response to a recession, it is crucial to understand how consumers respond to an extended period of belt tightening. This special session will add to this understanding by addressing the following four research questions:

1. **How do consumers allocate their consumption budget depending on their disposable income?** Understanding how income levels affect consumer expenditures across a wide range of products and services represents a key starting point for marketing during a recession.

2. **How do consumers respond to government stimulus payments?** Some administrations, such as the ones in the USA and Australia, have handed out stimulus payments to kick start the economy. Understanding how consumers spend these payments and whether there are differences between segments is crucial for firms and for governments.
3. **When does marketing in a recession make sense?** To design a sound marketing strategy in response to a recession, it is paramount to identify the theoretical conditions under which spending decreases or increases during a recession make sense.
4. **How does marketing effectiveness evolve over the business cycle?** While there has been much debate about whether or not price and advertising elasticities depend on the economic climate, actual empirical results have been lacking - so far.

In the next sections we elaborate on these four research questions.

How do Consumers Allocate Their Consumption Budget Depending on Their Income?

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All types of consumer expenditures ultimately vie for the same pool of limited resources - the consumer's discretionary income. Consequently, consumers' spending in a particular industry can be better understood in relation to their expenditures in others. Although marketers may believe that they are operating in distinct and unrelated industries, it is important to understand how consumers, with a given budget, make trade-offs between meeting different consumption needs.

For example, how much would escalating gas prices affect consumer spending on food and apparel? Which industries would gain most in terms of extra consumer spending as a result of a tax rebate? Answers to these questions are also important from a public policy standpoint because they provide insights into how consumer welfare would be affected as consumers reallocate their consumption budget in response to environmental changes.

This study proposes a structural demand model to approximate the household budget allocation decision, in which consumers are assumed to allocate a given budget across a full spectrum of consumption categories to maximize an underlying utility function. The authors illustrate the model using Consumer Expenditure Survey data from the United States, covering 31 consumption categories over 22 years. The calibrated model makes it possible to draw direct inferences about the tradeoffs individual households make when they face budget constraints and how their relative preferences for different consumption categories vary across life stages and income levels. The study also demonstrates how the proposed model can be used in policy simulations to quantify the potential impacts on consumption patterns due to shifts in prices or discretionary income.

The U.S. data are complemented with data from a consumption study that has been repeated annually in Sao Paulo in the past 20 years, which will provide additional insights into "consumption styles" of the poor and rich.

Segmenting Consumers Based on How They Spend a Tax Rebate: An Analysis of the Australian Stimulus Payment

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Tax rebates are instruments for stimulating consumer spending during recessions. Previous research assessed whether consumers use tax rebates for saving or, alternatively, purchasing goods and services (e.g. Chambers and Spence, 2008; Shapiro and Slemrod, 2003). These studies concentrated on aggregate estimations (with some exceptions, e.g., Dolnicar et al., 2008). Based on the saving motive hierarchy suggested in the economic psychology literature (Canova et al., 2005) and based on acquisition pattern analysis (Paas et al., 2007), we propose that consumers can be segmented on the purposes for which they use a tax rebate.

We apply Latent Class Analysis (e.g., Wedel and Kamakura, 2000) to segment consumers in Australia according to their allocation of the 2009 government rebate across a broad set of expenditure categories. We concentrate on the AU\$900 bonus that was made available to most Australian taxpayers. Data were collected online in the weeks before the bonus payment was released. Respondents indicated how much of the bonus they expected to allocate to each of ten broad expenditure goals.

The analysis reveals segments with different spending patterns, including segments we have labeled as ‘debt-payers’, ‘home improvers’, ‘investors’, ‘international travelers’, and five other segments. Segment membership is explained using a mix of socio-demographic variables, annual category expenditures, and two psychological factors: materialism and consumer confidence (Lemmens et al., 2007; Richins, 2004; Van Raaij and Gianotten, 1990).

Some additional results will be reported concerning the effects of income framing (Epley et al., 2006). We will discuss implications for policymakers and marketing.

When Marketing in a Recession Makes Sense

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This paper establishes a framework for understanding the optimal changes in marketing budgets during a recession. It first reviews popular prescriptions for advertising during a recession, as well as evidence of practice. For example, Moss Kantor (2009) suggests increasing marketing to replace lost sales, while Srinivasan et al. (2005) give a more contingent prescription; suggesting that marketing should only be increased if the firm has the slack, the skills and the stomach for it. Many authors focus on the allocation of resources amongst elements of the marketing mix, rather than the absolute level of marketing spend (e.g., Quelch 2008). Similarly, a number of authors have empirically studied the behaviour of both firms (the mix of those increasing and reducing their budgets) and consumers (decreases

in aggregate demand, trading down and other phenomena) in practice (e.g., Tellis and Tellis 2009).

We have two reservations about this work. First, by and large, it is not grounded in models of economic behaviour (and value maximization through a use of marketing mix response functions). Secondly, most empirical studies appear somewhat ad hoc and subject to significant threats to validity. For example, Barwise (1999) points to a potential selection bias: firms that maintain or increase their advertising during a recession may well be those with greater firm-specific opportunities, more far-sighted management, and so on. We therefore cannot validly attribute all, or even a specific proportion, of their superior subsequent performance (on average, relative to that of firms that reduce their marketing spend) to their higher expenditures.

We propose that this issue may be addressed in two ways. First, we develop a model of the effect of advertising on sales, to provide a framework within which to calibrate and compare the different effects of recessionary marketing spend. We then outline a way in which, at least in principle, empirical evidence could be gathered to test if and when marketing budgets should be changed in response to the business cycle.

The model starts with a simple formulation using a contemporaneous advertising response function and progressively adds phenomena. The final model includes carry over, competitive interference, and category expansion effects. By making response parameters a function of economic conditions (in this case gross personal disposable income), it is possible to compare the long term effects of advertising during a recession as opposed to a boom. This enables an examination of the conditions under which increasing advertising during a recession may be optimal.

Our proposed fieldwork involves longitudinal market data (including both firm inputs and outputs), combined with market research to calibrate the firm-specific resources that may lead to different levels of future opportunity. This enables us to make suggestions as to where future research could most fruitfully be undertaken.

In practice, firms are unlikely to have the full range of objective market data that would be needed to implement the theoretical model. Our aim is, instead, to provide a systematic framework which they can use to ensure that they consider all the significant issues, using a combination of data and judgement.

Advertising and Price Effectiveness over the Business Cycle

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While there exists a considerable body of literature on marketing mix effectiveness and elasticities in general (see e.g. Bijmolt et al., 2005; Hanssens, 2009 for recent overviews), previous research has not linked this to the business cycle. Does the effectiveness of marketing mix instruments vary across the business cycle, and if so, in what direction? What is the magnitude of the variation?

Although the subject of an intense debate, no systematic effort has been undertaken to provide answers to these questions. From a managerial point of view, insight into these questions helps companies in formulating their response to economic downturns. From an academic point of view, it is important to understand how the effectiveness of marketing mix instruments varies systematically over the business cycle. The purpose of the current study is to provide insights in these issues for two important marketing mix instruments, viz. Advertising and Price.

Advertising effectiveness could gain from economic downturns, as the overall advertising spending will be lower, thus reducing clutter and competitive interference (e.g. Danaher et al, 2008). At the same time, media rates will decline as a consequence of the simple laws of offer and (reduced) demand (AdAge, 2009). So the same advertising dollar may have more reach during a downturn than during an upturn. On the other hand, advertising effectiveness may also suffer from economic downturns. Consumers tend to refrain from spending as their disposable incomes may be lowered (Katona, 1975). Because of these opposing influences, the net effect of economic contractions on advertising effectiveness is hard to predict.

Price sensitivity is expected to increase during economic downturns (see e.g. Block, 1979). During economic sour times, consumers more than ever look for the best buy at the best price. They compare more, are more price aware (Estelami et al, 2001) and appreciate price cuts more (Quelch, 2008). However, even though we have good indications on the direction in which price sensitivity will evolve, little is known on the extent of the increase during contractions.

In our study we investigate how the effectiveness of advertising and price evolve over the business cycle. To address this issue, we estimate advertising and price elasticities based on a partial adjustment model (e.g. Hanssens et al, 2001 p.147) for 163 brands in 37 mature CPG categories in the UK, and this for 15 years of monthly data. This models enables us to analyze both short- and long-run effects of the included marketing mix instruments, and how these are moderated during expansions and contractions. Our findings will help managers to set their marketing budgets across the business cycle.

Conclusion

This special session addresses a very topical question: how to conduct marketing during a recession? By asking different questions (at the individual consumer level and at the market level), by using a wide variety of techniques (structural models, latent class models, sales response models) and by using data from different parts of the world (Australia, Brazil, U.K., and U.S), we believe that the four presentations will jointly provide a quite comprehensive answer to this question. We also anticipate a lively debate with other academics and practitioners as the recession affects almost every part of society.

References

- AdAge, 2009. When Will This End? February 16.
- Axaroglou, K., 2003. The Cyclicity of New Product Introductions. *Journal of Business* 76 (January) 29-48.
- Barwise, P., 1999, Advertising in a Recession, NTC Publications
- Bijmolt, T.H.A., Van Heerde, H.J. and Pieters, R.G.M., 2005. New Empirical Generalizations on the Determinants of Price Elasticity. *Journal of Marketing Research* 42 (2), 141-156.
- Block, F.L., 1979. *The Origins of Economic Disorders*. Berkely, CA. University of California Press.
- Canova, L., Rattazzi, A.M.M., and Webley, P., 2005. The hierarchical structure of saving motives. *Journal of Economic Psychology* 26 (1), 21-34.
- Chambers, V. and Spencer, M., 2008. Does changing the timing of a yearly individual tax refund change the amount spent vs. saved? *Journal of Economic Psychology* 29, 856-862.
- Danaher, P.J., Bonfrer, A., and Dhar, S., 2008. The Effect of Competitive Advertising Interference on Sales for Packaged Goods. *Journal of Marketing Research* 45 (2), 211-225.
- Deleersnyder, B., Dekimpe, M.G., Steenkamp, J-B.E.M. and Leeflang, P.L., 2009. The Role of National Culture in Advertising's Sensitivity to Business Cycles: An Investigation across Categories. *Journal of Marketing Research*, forthcoming.
- Devinney, T.M., 1990. New Products over the Business Cycle. *Journal of Product Innovation Management* 7, 261-273.
- Dolnicar, S., Crouch, G.I., Devinney, T., Huybers, T., Louviere, J. and Oppewal, H., 2008. Tourism and discretionary income allocation: Heterogeneity among households. *Tourism Management* 29, 44-52.
- Epley, N., Mak, D. and Idson, L.C., 2006. Bonus or rebate?: The impact of income framing on spending and saving. *Journal of Behavioral Decision Making* 19, 213-227.
- Estelami, H., Lehmann, D.R. and Holden, A.C., 2001. Macro-Economic Determinants of Consumer Price Knowledge: A Meta-Analysis of Four Decades of Research. *International Journal of Research in Marketing* 18 (4). 341-355.
- Frankenberger, K.D. and Graham, R.G., 2003. Should Firms Increase Advertising Expenditures During Recessions? MSI Report no 03-003. Cambridge MA. Marketing Science Institute.
- Hanssens, D.M., 2009. *Empirical Generalizations about Marketing Impact*. Cambridge, MA. Marketing Science Institute, Editor, Relevant Knowledge Series.

Hanssens, D.M., Parsons, L.J. and Schultz, R.L., 2001. Market Response Models. International Series in Quantitative Marketing. Dordrecht. Kluwer Academic Publishers.

Katona, G., 1975. Psychological Economics, New York: Elsevier Scientific Publishing Co.
Knowledge at Wharton, 2008. "When the going gets tough, the tough don't skimp on their ad budgets." Knowledge at Wharton, November 26, <http://www.knowledge.wharton.upenn.edu> .

Lamey, L., Deleersnyder, B., Dekimpe, M.G. and Steenkamp, J-B.E.M., 2007. How Business Cycles Contribute to Private-Label Success: Evidence from the United States and Europe. Journal of Marketing 71 (1), 1-15.

Lemmens, A., Croux, C. and Dekimpe, M.G., 2007. Consumer confidence in Europe: United in diversity? International Journal of Research in Marketing 24 (2), 113-127.

McKinsey, 2009. The Crisis: A New Era in Management. McKinsey Quarterly, 2009 (1).

Moss Kanter , R, 2009. "In a Recession, Put Everyone in Marketing" Harvard Business Publishing, April 29 <http://blogs.harvardbusiness.org/kanter/2009/04/in-a-recession-put-everyone-in.html>.

Paas, L.J., Bijmolt, T.H.A. and Vermunt, J.K., 2007. Acquisition patterns of financial products: A longitudinal investigation. Journal of Economic Psychology 28 (2), 229-241.

Quelch, J.A., 2008. Family First in Tough Marketing Times. The Financial Times, February 17.

Quelch, J.A., 2008. "Marketing Your Way Through a Recession." Working Knowledge, March 3, <http://hbswk.hbs.edu/item/5878.html>

Richins, M. L., 2004. "The material values scale: Measurement properties and development of a short form," Journal of Consumer Research 31(June), 209-219.

Shapiro, M.D. and Slemrod J., 2003. Consumer Response To Tax Rebates. American Economic Review 93(1), 381-396.

Srinivasan, R., Rangaswamy, A. , Lilien, G.L., 2005. "Turning adversity into advantage: Does proactive marketing during a recession pay off?" International Journal of Research in Marketing 22 (June), 109-25.

Srivastava, R.K., Shervani, T.A. and Fahey, L., 1999. Marketing, Business Processes and Shareholder Value: An Organizationally Embedded View of Marketing Activities and the Discipline of Marketing. Journal of Marketing 63 (Special Issue 1999), 168-179.

Tellis, G. J. and Tellis, K. 2009, "A Critical Review and Synthesis of Research on Advertising in a Recession" Working Paper, University of Southern California.

The Financial Times, 2008. Marketing Budget Cuts Predict to Deepen, July 13.

Van Raaij, W.F. and Gianotten, H.J., 1990. Consumer confidence, expenditure, saving and credit. *Journal Economic Psychology* 11 (2), 269-290.

Wedel, M. and Kamakura, W.A., 2000. *Market Segmentation: Conceptual and Methodological Foundations* (second edition). Dordrecht (Netherlands): Kluwer.