
Long-Term Impact of Advertising

Overview & Status

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Overview (Phase I)

- Response metrics
- Definition of the long run
- How long-run effects build up
- Empirical findings

Response Metrics

- Attitudinal, e.g. awareness, preference
 - High inertia, slow moving
- Transactional, e.g. sales, market share
 - Low inertia, fast moving
- Financial flow, e.g. revenue, profits
- Financial stock, e.g. customer equity, brand equity, stock price
- MASB's focus is on financial metrics

Short and Long-Run Impact

- Short run : immediate effects, distributed lag effects
= temporary lift (followed by mean reversion)
- Long run: persistent impact (no mean reversion)
= permanent lift
- Not tied to specific time subscripts
- These lifts occur at the level of response, but also at the level of advertising spending
- Resulting in four strategic scenarios

Long-run scenarios

	Temporary Lift	Permanent Lift
Temporary spending (campaign)	Business as usual	Hysteresis
Sustained spending (policy)	Escalation	Evolving business

(Dekimpe & Hanssens 1999)

How long-run effects build up: six components

Long-run impact component I

- **1) immediate response** is as discussed in the MASB TV advertising document. It must be measured *above and beyond* base sales, with either experimental or econometric techniques.
 - temporary lift
 - focus of most advertising research
 - *is essential for the creation of long-run impact*

Long-run impact component II

- **2) carry-over effects reflect delayed buyer response, especially in durable-goods markets. It is often determined either with distributed-lag models, or with intermediate performance metrics (e.g. leads in business-to-business markets).**
 - Result in time-shifting of impact (“dust settling”)
 - Not fundamentally different from short-run effect
 - Immediate + carryover = total temporary lift

Long-run impact component III

- **3) purchase reinforcement refers to repeat-buying as a result of the initial, advertising-induced purchase. It is equivalent to “customer retention” in relationship businesses. Can also build word-of-mouth.**
 - Builds long-run potential
 - Without purchase reinforcement, long-run effect cannot materialize

Long-run impact component IV

- **4) feedback effect** is the impact of the initial sales lift on subsequent advertising spending. For example, is the advertising limited to a single campaign, or does it become “policy” as a result of its initial success?
 - also helps builds the long-run effect
 - however, can result in escalation if response effect wanes

Long-run impact component V

- **5) decision rules refer to the impact of advertising spending on the other parts of the brand's marketing mix. For example, reductions in trade promotions to offset the ad spend, increases in sales calls or retail price to capitalize on positive consumer response to advertising.**
 - Together, they shape the firm's overall marketing strategy
 - Inertia in decision making is part of this
 - Opportunity to create synergy

Long-run impact component VI

- **6) competitive reaction with advertising (which can be share-stealing or category-expanding) and other competitive marketing tactics. The intensity of these reactions can determine the ultimate level of marketing rivalry in an industry**
 - The predominant form of reaction is NO reaction
 - If reaction, often category-enhancing in new markets, share-stealing in established markets

Conclusion on long-run build-up

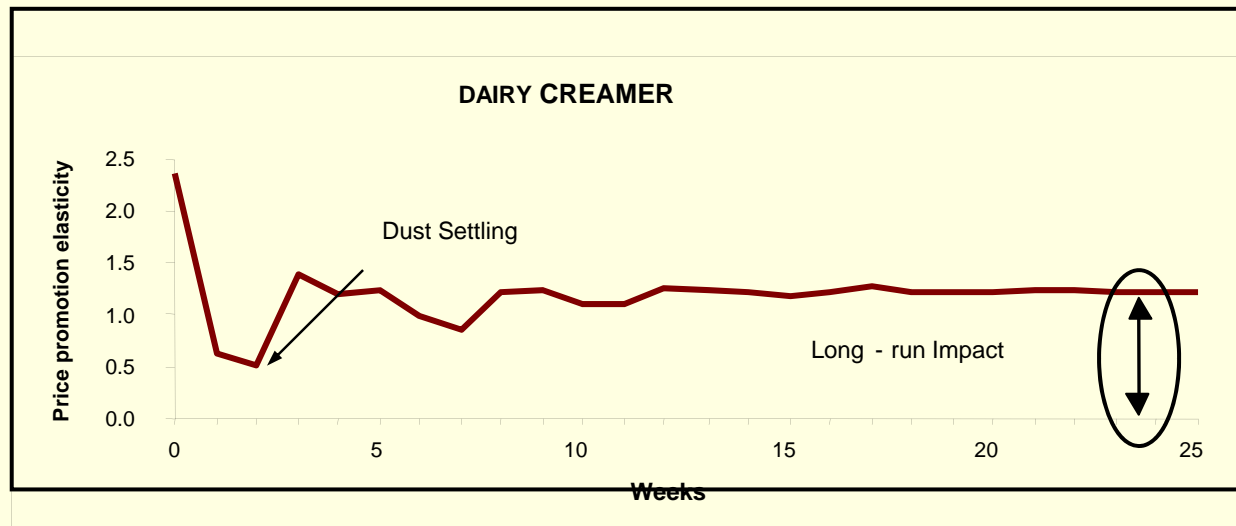
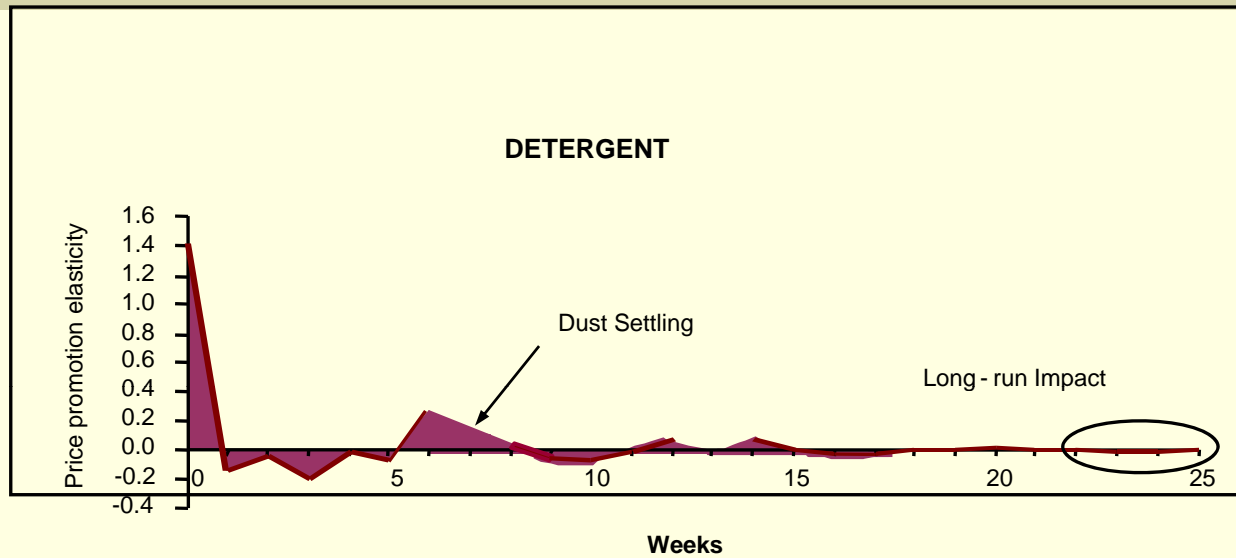
- The “long run” develops as a result of the relative strength of these six components
- Simple example: sustained, effective advertising without competitive reaction is likely to have a stronger long-term impact
- Methods exist for disentangling the effect components
- Several “non-advertising” forces determine the long-run impact of advertising

Empirical Findings: Single Advertising Actions ("campaigns")

Long-term effects: single marketing actions

- **Examples: ad campaigns, sponsorships, promotions etc...**
- **Compare performance before and after over time, after the “dust has settled”**
- **Question: does performance eventually return to pre-action levels ?**
 - **Yes: temporary effects (can be distributed over time)**
 - **No: permanent effects (true long-term)**
- **Good data + modern time-series econometrics provide good answers. Marketing experiments can supplement when data are lacking.**

Dynamics of Single Marketing Effects



Key learnings: single-action impact

- **Return-to-the-mean is the rule, permanent effects are the exception.**
- **Permanent impacts occur almost exclusively in emerging, evolving markets**

Long-term advertising impact

- **Most common: smooth decay to mean reversion**
- **Short-term effect depends mainly on business conditions (e.g. pre-existing awareness, new products)**
- **Average short-term elasticities: 0.10**
 - up to 0.3 for new products
 - 0.05 or less for established products
- **Long-term advertising effect = 2 * short-term effect**
 - Customers learn quickly, forget slowly
 - Economic effects duration: a few months

Can single marketing actions ever have permanent effects? (hysteresis)

Yes, when customers are still learning, and when marketing support coincides with a temporary competitive product advantage

Occurs rarely in practice

Empirical Findings: Advertising Policies (sustained spending)

Guiding principles

- As most ad campaigns have a temporary impact, long-term effects generally require sustained advertising spending
- This becomes evident when “share of voice” is a significant driver of business performance
- Reduction of short-term consumer response can result in unprofitable spending escalation
- Continuous monitoring of short-term impact is therefore important

Relative importance of six components

- Long-run effect up to five times stronger and longer-lasting than short-term consumer response
- Difference is driven mainly by strategic company actions, *not* by competitor response
 - Support by other marketing-mix variables
 - Inertia

(Pauwels 2004)

Long-term impact of policy shifts

- Defined as a *structural break* in spending pattern (“doing things differently”)
- Important, but harder to measure, fewer case studies
- Lessons from a strategic marketing shift: P&G
- Most policy shifts are gradual or evolutionary

P&G “Value Pricing” strategy

- Two years of *sustained* shift to fewer promotions and more advertising in 24 categories, featuring 118 brands
- On average, P&G market share was down 16%
- But net profit increased by over \$ 1 billion !
- Transfer of promotion savings to advertising (\$260 million) was not essential
- Is the shareholder better off ?

(Ailawadi, Lehmann & Neslin 2001)

Empirical Findings: Shareholder Value

What about the ultimate long-run metric, stock price ?

- Is the only available database on the future (expectations space)
- Surprisingly long-term oriented
 - Investors see through earnings management games
 - Reward innovators, punish sales promoters
- Advertising is found to have a small but positive impact on stock returns (Joshi & Hanssens 2008)

Some References

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Phase II

The Long-Term Project: Recap

Objectives

Document what is known about long Term Effects (Phase I)
Determine metric(s) and models that can be used to forecast (and improve) the long-term effects of advertising (Phase II+).

Description

Phase I: Review what is known:

- 1) **short-term response** as discussed in the TV advertising document.
- 2) **carry-over effects** reflect delayed buyer response.
- 3) **purchase reinforcement** is repeat-buying, retention and word-of-mouth as a result of initial advertising-induced purchase.
- 4) **feedback effect** is the impact of the initial sales lift on subsequent advertising spending.
- 5) **decision rules** are the impact of advertising spending on other parts of the brand's marketing mix.
- 6) **competitive reaction** with advertising & other competitive tactics.

Defining Phase II

- For each of the long-run impact components we describe
 - Key metrics
 - Available analytics
 - Processes to be targeted
- These steps are illustrated below

Components 1 and 2 : immediate response and carryover

- **Metric: lift in a performance metric (e.g. response elasticity) that is known to be financially relevant**
 - **Examples: unit sales, leads, internet searches**
- **Analytics: market response model or experiment**
- **Process: periodic review with tangible action**
 - **shift resources toward marketing that provides tangible lift**
 - **discontinue unproductive marketing**

Component 3: purchase reinforcement

- **Metric: improvement in a reinforcement variable**
 - **Examples: repeat-purchase rate, retention rate, customer referrals, customer satisfaction**
- **Analytics: monitoring the metric or dynamic market response models**
- **Process: periodic monitoring with diagnostic action when needed (red flags)**
 - **Example: repeat rates are down. Why ? What has been done to correct the problem ?**

Component 4: feedback effects

- **Metric: evolution of budget allocations as a result of new market response insights**
 - **Examples: continuing a successful campaign (per components 1-3), discontinuing or rejuvenating a worn-out campaign**
- **Analytics: monitoring the metric, or advertising decision modeling**
- **Process: from tradition-based to response-based marketing**
 - **Recognizing past allocation errors and implementing learnings**

Component 5: decision rules

- **Metric: degree of coordination across the marketing mix**
 - **Example: correlation between sales calls and advertising support. Should be positive if synergistic.**
- **Analytics: market response models with interaction effects, marketing decision models**
- **Process: cross-functional decision teams**
 - **Coordination when there is synergy**
 - **Clutter avoidance when there is competition**

Component 6: competitive reaction

- **Metric: cross-elasticities**
 - **Examples: cross-sales effects , reaction elasticities**
- **Analytics: competitive market response models with competitive effects, reaction functions**
- **Process: decision rules for optimal competitive behavior (when is share-of-voice important ?)**
 - **If no negative cross-sales effect: don't react**
 - **If negative cross-sales effect: react only with effective instruments**



Questions and Comments ?



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Thank you!



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