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# Academic Presentation

## Capitalizing Advertising Spending

Shuba Srinivasan
Boston University
Member of the MASB
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of the Marketing Accountability Foundation

# Capitalizing Advertising Spending

Authors:

- Edward Riedl
- Emanuel Bayer
- Bernd Skiera
- Shuba Srinivasan

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# Motivation

## Objective of financial reporting

- **Provision of financial information useful for decision making (FASB 2010)**
- **Correct mapping of firm's economics into its reported financials**
  - **A mismatch, coupled with potential managerial incentives, may lead to sub-optimal reporting and operating decisions**

## Current financial reporting treats most advertising spending as an expense vs. capitalization as an investment

Two reasons (FASB accounting standard 720-35)

- the benefit period is presumed to be **short**
- both the **periods** of receiving future economic benefits, and the **amount** of benefits, cannot be measured objectively

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# Problem Statement

- However, there is <u>heterogeneity</u> in advertising spending
  - Short-term versus long-term impact
  - Media (e.g., TV, radio, digital)
  - Customers targeted and products advertised

- Problem: A mismatch between the economics of (some) advertising and the homogenous financial reporting treatment

- Why address this debate now?
  - Evolution of accounting standards (e.g., more fair value reporting)
  - Evolution of measurement of advertising response (more and better data, better predictive analytics)

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# Research Questions

1) What are the <u>conditions</u> for capitalizing advertising spending?
2) What recent developments in advertising spending could better fulfill these conditions?
3) What are the consequences of capitalized advertising spending?
4) What are the stakeholder implications (i.e., for firms, investors, and regulators)?

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# Expense versus Capitalization

- **Per FASB (Financial Accounting Standards Board):**
  - Expense: Advertising spending appears only as an expense on the firm's income statement; there is no asset on the balance sheet.

    "Outflows or other using up of assets or incurrence of liabilities (or a combination of both) from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major or central operations." (FASB 2010)
  - Capitalization: should occur if the spending creates an "asset," defined as:

    "Probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." (FASB 2010)

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# Expense versus Capitalization: Numerical Example

**Assumptions:**

- Advertising spending
  - year 0 (and before): $ 0
  - year 1: $100
  - year 2: $ 0
- Profit in both years before advertising spending: $180
- Advertising impacts sales equally across two years

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**Expense:**

- Income statement
  - Advertising spending:
    - Year 1: -$100
    - Year 2: -$0
  - Profit:
    - Year 1: $180 - $100 = $80
    - Year 2: $180 - $0 = $180
- Balance sheet
  - $0 for asset advertising spending

**Capitalization:**

- Income statement
  - Advertising spending:
    - Year 1: -$50
    - Year 2: -$50
  - Profit:
    - Year 1: $180 - $50 = $130
    - Year 2: $180 - $50 = $130
- Balance sheet
  - Year 1: $50 for asset advertising spending
    Equity increases by $50
  - Year 2: $0 for asset advertising spending

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- Capitalization leads to asset on the balance sheet, expensing does not
- Capitalization allocates advertising spending over time, expensing does not

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# Mapping Asset Definition to Advertising Constructs

**Direct-Response Advertising**

| Accounting | | Marketing |
|---|---|---|
| • Probable future economic benefit | → | • Long-term effect: firm can precisely identify the future cash flows associated with the particular advertising spending |
| | | • Accountability |
| • Controlled by entity | → | • *Conversion:* firm will receive benefits associated with sales from advertising |
| • Result of past transactions | → | • *Attribution:* results from a past transaction (as the advertising has taken place) |

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# Mapping Advertising Spending into Financial Reporting Treatment

| Benefit Horizon / Accountability | **No Long-Term Benefit** (e.g., non-contractual products) | **Long-Term Benefit** (e.g., contractual products) |
| --- | --- | --- |
| **Low Accountability** (e.g., TV, print, radio, outdoor advertising) | | |
| **High Accountability** (e.g., direct mail, e-mail marketing, Google advertising, affiliate marketing, direct-response advertising like field sales force and telesales) | | |

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| **High Accountability** (e.g., direct mail, e-mail marketing, Google advertising, affiliate marketing, direct-response advertising like field sales force and telesales) | **(3) Traceable Short-Term Impact**<br><br>**EXPENSE** | |

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| **High Accountability** (e.g., direct mail, e-mail marketing, Google advertising, affiliate marketing, direct-response advertising like field sales force and telesales) | (3) Traceable Short-Term Impact<br><br>EXPENSE | **(4) Traceable Long-Term Impact**<br><br>**CAPITALIZE** |

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# Key Insights

- **Two primary dimensions to assess if any type of advertising is appropriate for capitalization**
  - **Long-term effect**
  - **Accountability**
    - **Conversion**
    - **Attribution**

- **Advertising spending at the intersection of *long-term effect* and *accountability* appears to satisfy capitalization requirements**

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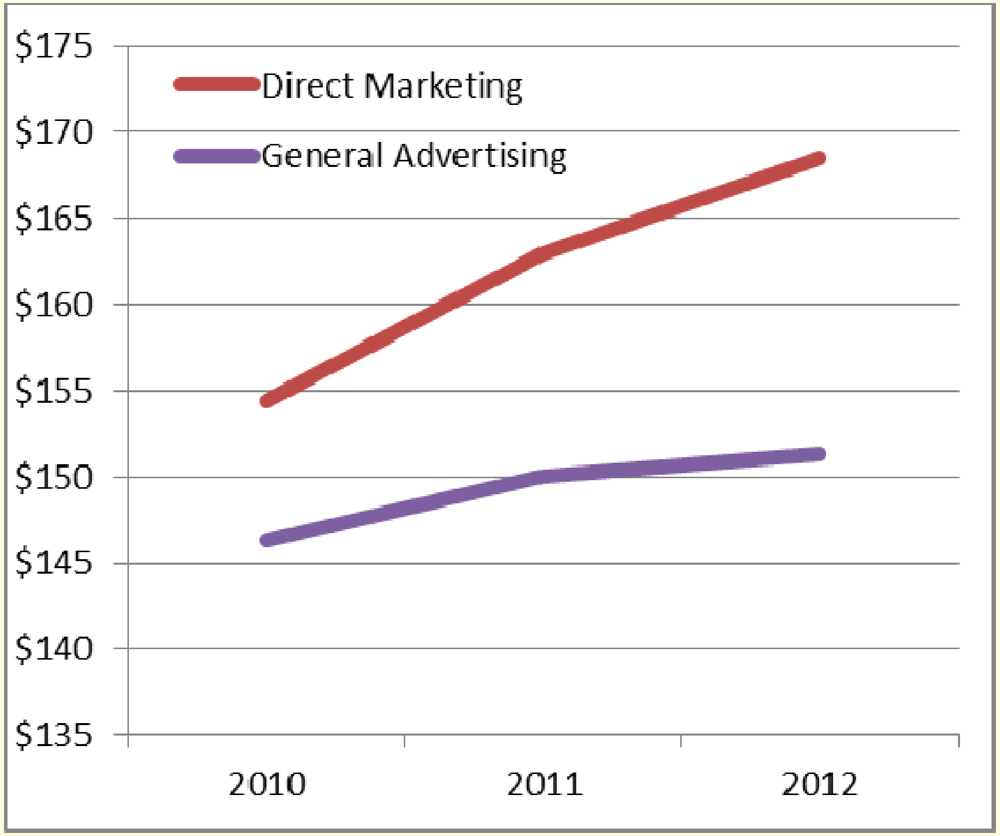
# Share of Direct Marketing Increasing

- Direct marketing accounts for **<u>> 50%</u>** of total US advertising spending
- **<u>Trend:</u>** increasing share of DRA through 2016 (DMA 2014)

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Source: Own representation based on Direct Marketing Association 2014

# Descriptive / Empirical Analysis

- **Aims of Empirical Study**
  - Firm Perspective: disclosure behavior over time
  - Capital Market Perspective: Value relevance of advertising spending over time
  - Implications of Pro Forma Capitalization (vs. expensing) on volatility of profitability ratios

- **Caveat:**
  - What we want: spending by type of advertising for all firms
  - What we have: spending on aggregate advertising for some firms

- **Data Set:**

  Panel data, US firms, 1990–2013
  - 14 years, average *N* = 8,875 firms per year
  - 21,774 firms in total

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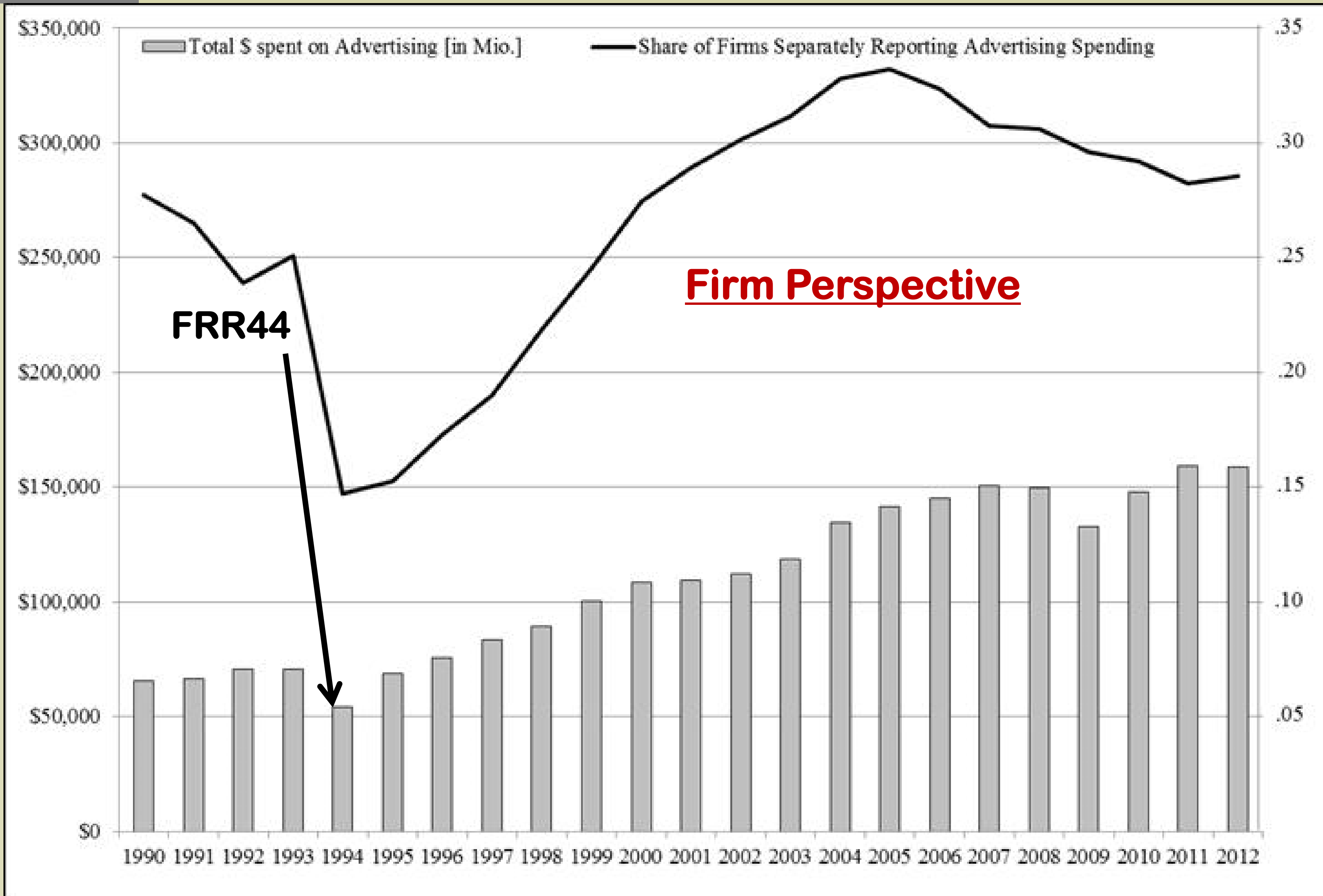
# % Firms Separately Reporting Advertising and Total Advertising Spend ($)



# Equity Market Valuation of Advertising Spending Over Time

## Capital Market Perspective

- **Step 1:**

$$\text{Return}_i = \alpha + \beta_1 \times \text{Net Income}_i^{\text{before Advertising Spending}} + \beta_2 \times \text{Advertising Spending}_i + \varepsilon_i.$$

- **Step 2:**
  - Regress the series of annual $\beta 2$ estimates onto a time trend variable
  - Coefficient on time trend: 0.108 (SE = 0.042, significant at the 1% level)
  - Average value of $\beta_2$ across the sample years is 1.614

- **Inference:**
  - Stock returns and advertising spending association increases by 6.70% (0.108/1.614) per year over 1990–2013
  - Suggests equity market perceives advertising to have increasingly (on average) longer-term effects upon firms' overall valuation

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# Expensing vs. Capitalization Scenarios

## Implications of Pro Forma Capitalization (vs. expensing) for volatility of profitability ratios?

| | Expensing | Capitalization | | | |
|---|---|---|---|---|---|
| Years | Base Case | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| | (1) | (2) | (3) | (4) | (5) |
| *t* = 1 | 100.00% | 50.00% | 50.00% | 50.00% | 50.00% |
| *t* = 2 | | 25.00% | 16.66% | 12.50% | 10.00% |
| *t* = 3 | | 25.00% | 16.66% | 12.50% | 10.00% |
| *t* = 4 | | | 16.66% | 12.50% | 10.00% |
| *t* = 5 | | | | 12.50% | 10.00% |
| *t* = 6 | | | | | 10.00% |

- **Allocation of advertising spending across years**
- **Allocation is related to magnitude and timing of cash flows**

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# Effect of Capitalization of Advertising Spending on Volatility of Profitability Ratios

- Median volatility decreases substantially if advertising spending gets capitalized
- Percentage decrease in volatility lies between 18% and 36%

| | Median SD_ROA | Median SD_ROE | Median SD_ROIC | Number of Firms (*N*) |
|---|---|---|---|---|
| Base Case | 0.057 | 0.113 | 0.125 | |
| Scenario 1 (3 year amortization) | 0.047 | 0.091 | 0.091 | 2,311 |
| Decrease in Median SD | –18.20%*** | –19.43%*** | –27.38%*** | |
| Base Case | 0.056 | 0.111 | 0.121 | |
| Scenario 2 (4 year amortization) | 0.043 | 0.086 | 0.085 | 2,111 |
| Decrease in Median SD | –22.55%*** | –21.84%*** | –29.75%*** | |
| Base Case | 0.054 | 0.106 | 0.117 | |
| Scenario 3 (5 year amortization) | 0.039 | 0.080 | 0.078 | 1,961 |
| Decrease in Median SD | –27.44%*** | –24.27%*** | –33.63%*** | |
| Base Case | 0.053 | 0.102 | 0.113 | |
| Scenario 4 (6 year amortization) | 0.034 | 0.076 | 0.072 | 1,828 |
| Decrease in Median SD | –34.70%*** | –25.49%*** | –36.00%*** | |

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# Summary of Key Findings

- **Firm Disclosure Behavior**
  - % separately reporting advertising spending increased from 1994 on
  - But: heterogeneity across sectors

- **Value Relevance of Advertising Spending Over Time**
  - Association (stock returns and advertising spending) increases by 6.70% per year
  - Suggests equity market perceives advertising to have increasingly longer-term average effects upon firms' overall valuation

- **Effect of Pro Forma Capitalization (vs. expensing) on volatility of profitability ratios**
  - Capitalization (vs. expensing) results in lower volatility of profitability ratios

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# Recommendations

- Firms
  - Likelihood of fulfilling requirements for capitalization has increased
  - Should increase voluntary disclosure on nature of advertising spending
  - Consider how the current homogenous expensing requirement may affect (suboptimally) internal decisions

- Investors and Creditors
  - Understand limits of current financial reporting for advertising
  - Recognize heterogeneity of advertising spending

- Regulators
  - Current reporting treatment fails to recognize (i) heterogeneity in advertising and (ii) advances in advertising data analysis
  - We provide a framework to help re-assess reporting for advertising and evaluate ***any type*** of advertising

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# Conclusion

- We argue there is a <u>mismatch</u> between economics of advertising and reporting of advertising spending
  - Advertising spending is heterogeneous
  - Financial reporting treatment is homogenous (expensing)

- We provide a framework to assess all advertising spending
  - <u>Accountability</u> (conversion & attribution), and
  - <u>Long-term effect</u>

We argue recent advances in advertising (data availability, predictive analytics) suggest increased likelihood of meeting capitalization criteria

- Advertising at <u>intersection</u> of accountability/long-term effects
- Note: increasing trend of advertising meeting this criteria

Capitalization of certain advertising spending would

- Increase transparency about a firm's economic situation
- Better align benefit and cost of advertising spending

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# Thank you for your attention!