

Strategic Secrecy or Managerial Shielding: Examining the Motives Behind Aggregated Advertising Expenditures

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國立清華大學

Motivation

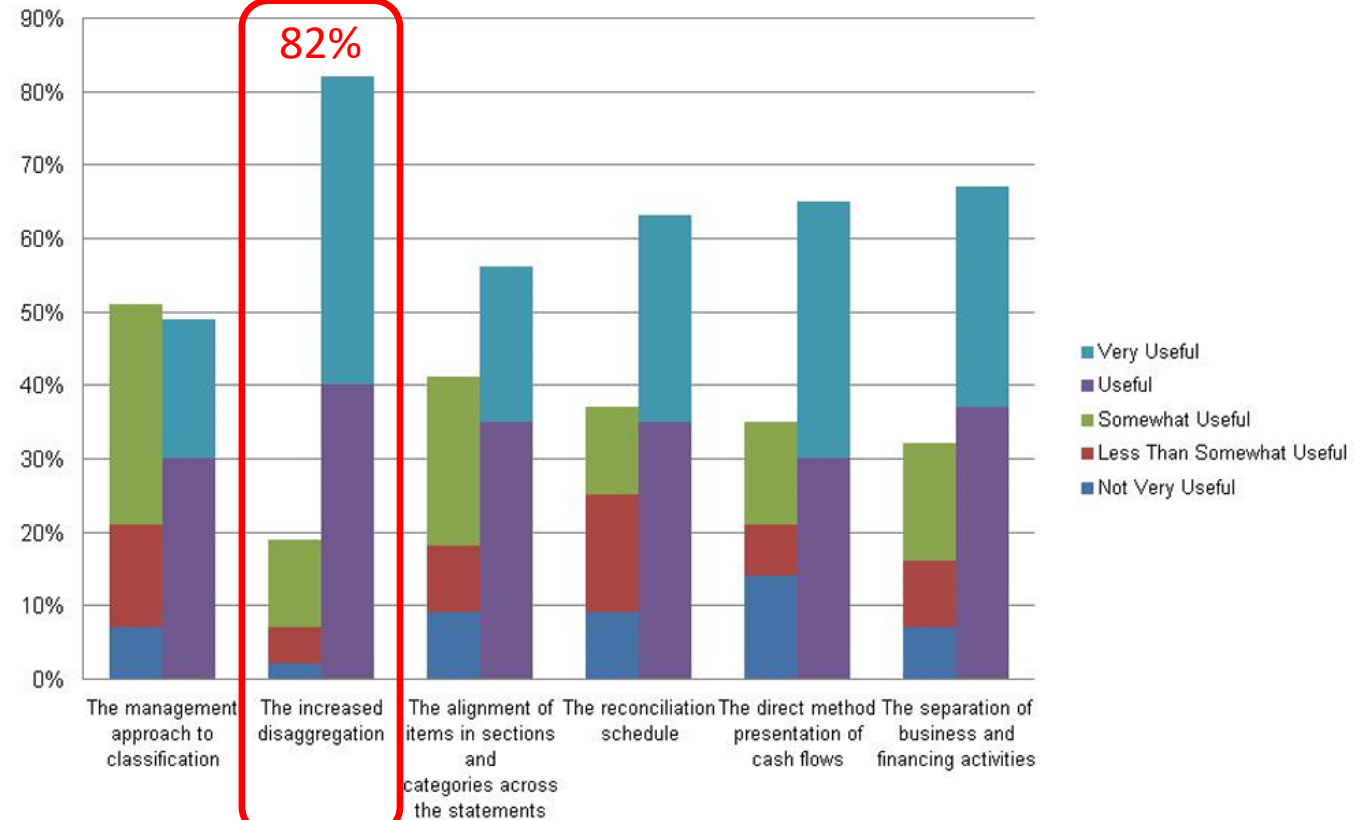


IASB Meeting September 2009
FASB - Informational Board
meeting September 21, 2009

Project **Financial Statement Presentation**
Topic **Analyst Field Test Results**

Analysts considered increased disaggregation to be the most valuable change in the proposed presentation, even surpassing the direct method cash flow statement.

How Useful Are The Aspects Of The Proposed Presentation Model?



Motivation

FINANCIAL ACCOUNTING SERIES



EXPOSURE DRAFT

Proposed Accounting Standards Update

The joint FASB/IASB financial statement presentation project

July 1, 2010

Disaggregated Income Statement

	For the year ended December 31, 20X1
Wholesale sales	2,790,080
Retail sales	697,520
Total revenue	3,487,600
Cost of goods sold 1	
Materials	(1,039,104)
Compensation expense	(405,000)
Pension expense	(43,175)
Overhead—depreciation	(219,300)
Transportation and other	(160,800)
Change in inventory	(60,250)
Loss on obsolete and damaged inventory	(29,000)
Total cost of goods sold	(1,956,629)
Selling expenses 2	
Advertising	(60,000)
Compensation	(56,700)
Bad debt	(23,068)
Other selling	(13,500)
Total selling expenses	(153,268)
General and administrative expenses 3	
Compensation	(321,300)
Pension	(43,175)
Depreciation	(59,820)
Share-based compensation	(22,023)
Other general and administrative	(23,436)
Total general and administrative expenses	(469,754)
Other operating 4	
Gain on disposal of property, plant, and equipment	22,650
Loss on sale of receivables	(4,987)
Total other operating income	17,663
Operating income before operating finance costs	925,612
Operating finance costs 5	
Interest cost—pension	(30,800)
Expected return on pension plan assets	13,200
Interest expense on lease liability	(14,825)
Accretion expense on decommissioning liability	(810)
Total operating finance costs	(33,235)
Total operating income	892,377

Motivation

Apple Inc.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except number of shares, which are reflected in thousands, and per-share amounts)

	Years ended		
	September 30, 2023	September 24, 2022	September 25, 2021
Net sales:			
Products	\$ 298,085	\$ 316,199	\$ 297,392
Services	85,200	78,129	68,425
Total net sales	383,285	394,328	365,817
Cost of sales: ①			
Products	189,282	201,471	192,266
Services	24,855	22,075	20,715
Total cost of sales	214,137	223,546	212,981
Gross margin	169,148	170,782	152,836
Operating expenses: ②			
Research and development	29,915	26,251	21,914
Selling, general and administrative	24,932	25,094	21,973
Total operating expenses	54,847	51,345	43,887
Operating income	114,301	119,437	108,949

Companies routinely disaggregate their expenses into two categories.

Advertising expenses

Motivation

Financial Reporting
Release 44 (FRR44)

1994/12/14

Before

- ❑ Firms had an affirmative duty to disclose advertising expense if it exceeded 1% of sales.

After

- ❑ Firms had to disclose advertising expense if managers determine the information to be material.

- “Several financial analysts indicated that they thought the actual cost of providing this information is small, and...the reduced disclosures could lead to an increase in the costs of capital due to **an increase in investor uncertainty.**”

Motivation



[HOME](#) > [ADVERTISING](#)

Apple mysteriously stopped disclosing how much it spends on ads

Lara O'Reilly [Nov 24, 2016, 10:07 PM GMT+8](#)



Apple has stopped disclosing how much it spends on advertising, and **it's not entirely clear why.**

As analysts at Wells Fargo pointed out in a recent research note, that's a shame as **it was useful to track Apple's advertising expense,** and its ad spend as a percentage of revenue, over time.

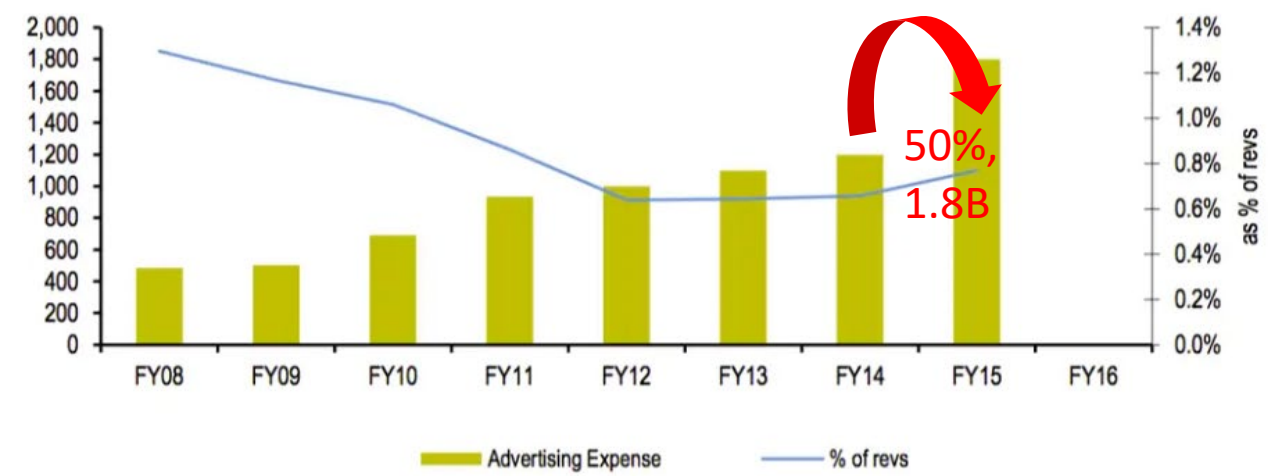
Motivation

HOME > ADVERTISING

Apple mysteriously stopped disclosing how much it spends on ads

Lara O'Reilly [Nov 24, 2016, 10:07 PM GMT+8](#)

Exhibit 3. Advertising Expense (in \$MM) and as a percent of revenue



Source: Company reports and Wells Fargo Securities, LLC
Note: Apple did not provide details in its 2016 10-K.

Motivation

➤ Known

- ❑ Verrecchia (1983): discretionary disclosure depends on proprietary costs.
- ❑ Aggregation vs. Disaggregation
 - ✓ Aggregation keeps competitive advantages.
(Arya et al., 2010; Berger et al., 2024; Liang 2024)
 - ✓ Disaggregation mitigates information asymmetry.
(Hopwood et al., 1982; Amir et al., 2014; Hinson et al., 2024)

Motivation

- **Unknown**

Aggregated Advertising Expenditures

```
graph LR; A[Aggregated Advertising Expenditures] --> B[Consequences]; C[Determinants] --> A;
```

Determinants:

Proprietary costs (Liang 2024)

Agency costs ?

Consequences:

➤ Shareholders benefit ?

➤ Analysts overcome ?

We classify firms into....

Reported Advertising Expenditures

- **Compustat** item
"XAD." (Annual report)

Observed Advertising Expenditures

- **Kantar Group** tracks advertising expenditures across print, broadcast, and online mediums.

Case	Reported Advertising	Observed Advertising	Firm Types
1	Missing	Material*	Confidential-expenditure firms
2	Missing	Immaterial	Immaterial-expenditure firms Transparent-expenditure firms Specified-expenditure firms
3	Non-missing	Non-missing	

*greater than 5% of pretax income.

Motivation

- **Unknown**

Aggregated Advertising Expenditures



Determinants:

Proprietary costs (Liang 2024)

Agency costs ?

H6: CEO tenure is unrelated to whether a firm keeps advertising expenditures confidential.

H7: Insider trading is equally profitable in confidential-expenditure and transparent-expenditure firms.

Consequences:

➤ Shareholders benefit ?

H1: Firm value of confidential-expenditure firms > firm value of transparent-expenditure firms.

➤ Analysts overcome ?

H2: Similar analysts forecast dispersion.

H3: Similar analysts forecast errors.

H4: Analysts ask similar numbers of advertising-related questions.

H5: Managers of confidential-expenditure firms provide more soft information.

Summary of our results

- ① Does aggregated advertising expenditures benefit shareholders? **No**
 - Confidential-expenditure firms' valuation is not higher.
- ② Do analysts overcome confidential advertising expenditures? **No**
 - Confidential advertising is associated with higher analyst dispersion and downward forecast errors.
 - Analysts seek more advertising data for these firms, but executives do not share additional soft information on advertising during conference calls.
- ③ Do managers benefit from confidential advertising? **Yes**
 - Short-tenure CEOs choose not to report advertising expenditures.
 - Insider trading profits increased within firms that switched from disaggregation to aggregation of their advertising expenditures.



Sample

- The intersection of US firms in the Compustat database and Kantar Group (available since 1995) from 1995 to 2019.
 - 6,342 firms.
 - Firms without reported advertising make up 51.7%.
 - Among these aggregated firms, 14.2% have material observed advertising expenditures.
- We use IBES for analyst forecast errors and dispersion and the number of analyst followers.
- We use Capital IQ for transcripts of earnings calls.

Transparent and Confidential-Expenditure Firms Histograms

- We report the distributions of observed advertising expenditures of a confidential advertisers (yellow) and transparent firms (green).

→ Confidential advertisers tend to spend the most on advertising!

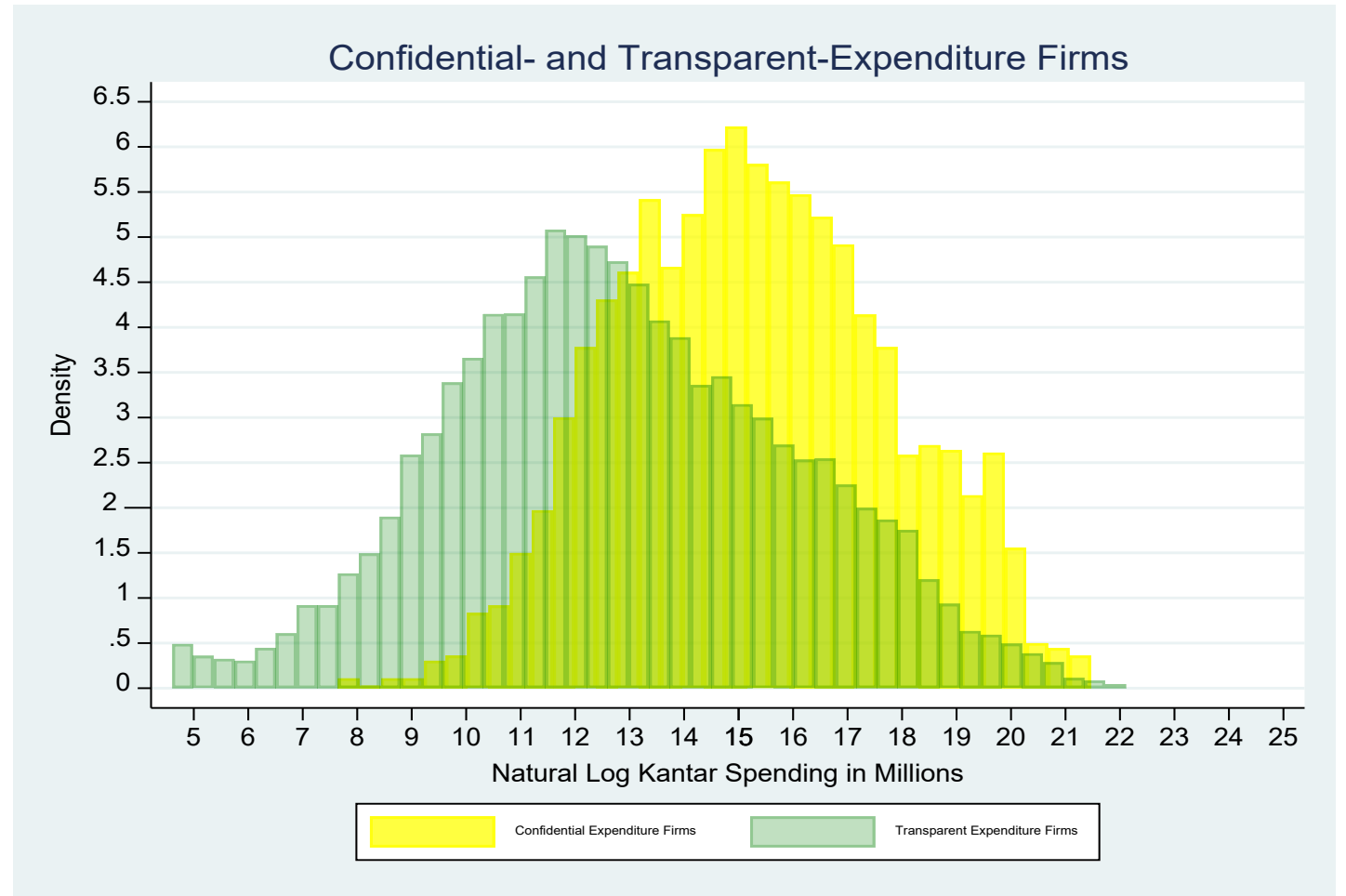


Table 1: Summary Statistics of Advertising Expenditures

❖ We classify all firm-year observations into three groups:

		N	Mean	St. Dev	1st quartile	Median	3rd quartile
For specified-expenditure firms:	<u>Advertising expenditures are in the Compustat.</u>						
Reported Advertising (from Compustat)	48%	23,625	132.808	527.379	1.454	7.800	47.305
Observed Advertising (from Kantar Group)		23,625	43.034	187.158	0.099	0.985	12.428
For confidential-expenditure advertisers:	<u>Advertising expenditures are missing in the Compustat, while their advertising expenditures in Kantar \geq5% of pretax income .</u>						
Observed Advertising (from Kantar Group)		3,598	53.370	163.745	0.654	3.935	23.814
For immaterial-expenditure firms:	<u>Advertising expenditures are missing in the Compustat, while their advertising expenditures in Kantar $<$5% of pretax income .</u>						
Observed Advertising (from Kantar Group)		21,682	4.256	32.615	0.022	0.127	0.749

Table 2: Confidential-expenditure and Firm Value

Variable	(1) Log (P/B) _t	(2) Log(<i>Tobin's Q</i>) _t
<i>Confidential-expenditure</i> _t	-0.075** (-2.526)	-0.038** (-2.231)
Constant	2.360*** (14.962)	1.297*** (14.709)
Control variables	Yes	Yes
Year	<p>➤ Confidential-expenditure firms are discounted in their stock price.</p>	
Firm		
N	20,066	20,811
Adjusted R ²	0.743	0.809

Table 3: Confidential-expenditure and Analysts Forecast Dispersion

	(1)	(2)	(3)	(4)
Variable	<i>Forecast Dispersion 1M_t</i> (Median)	<i>Forecast Dispersion 2M_t</i> (Median)	<i>Forecast Dispersion 1M_t</i> (Mean)	<i>Forecast Dispersion 2M_t</i> (Mean)
<i>Confidential-expenditure_{t-1}</i>	0.044*** (3.959)	0.050*** (4.378)	0.048*** (4.295)	0.045*** (4.093)
Control Variables	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
<i>N</i>	24643	24599	24643	24599
Adjusted <i>R</i> ²	0.184	0.183	0.191	0.189
<i>F</i>	23.939	21.336	24.105	21.546

➤ Analysts' forecasts diverse more on confidential advertisers.

Table 4: Confidential-expenditure and Analysts Overestimation in EPS

Variable	Expect -Actual	(1)	(2)	(3)	(4)
		<i>Overestimate1M_t</i> (Median)	<i>Overestimate2M_t</i> (Median)	<i>Overestimate1M_t</i> (Mean)	<i>Overestimate 2M_t</i> (Mean)
<i>Confidential-expenditure_{t-1}</i>		-0.004** (-2.186)	-0.004** (-2.411)	-0.004** (-2.092)	-0.004** (-2.178)
Control Variables		Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes
Firm Fixed Effects		Yes	Yes	Yes	Yes
N		26821	26684	26821	26684
Adjusted R ²		0.280	0.275	0.279	0.271
F		7.180	7.038	7.549	7.186

➤ Analysts make a more pessimistic view of confidential advertisers.

Table 5: Advertising-related Words Mentioned by Analysts in the Earnings Call

Panel A: The percentage of transcripts including advertising-related words mentioned by analysts

	Firm Type			All Obs
	Specified Expenditure (1)	Confidential Expenditure (2)	Immaterial Expenditure (3)	
Earnings Call Available	8337	617	5800	14754
Questions from Analysts	3821	312	990	5123
% of Transcript	45.83%	50.57%	17.07%	34.72%

- Test Statistics: Columns 1 vs 2 (t-test: -4.74%; p-value: 0.0228)
Columns 2 vs 3 (t-test: 33.5%; p-value: 0.0000)

- Advertising-related words: Marketing, Brand, Advertising, Branding, and Promotion

Table 6: Advertising-related Words Answered by Executives in the Earnings Call

Panel A: The percentage of transcripts including advertising-related words mentioned by executives

	Firm Type			All Obs
	Specified Expenditure (1)	Confidential Expenditure (2)	Immaterial Expenditure (3)	
Earnings Call Available	8337	617	5800	14754
Answered by Executives	5639	435	2087	8161
% of Transcript	67.64%	70.50%	35.98%	55.31%

- Test Statistics: Columns 1 vs 2 (t-test: -2.86%; p-value: 0.1417)
Columns 2 vs 3 (t-test: 34.52%; p-value: 0.0000)

- Advertising-related words: Marketing, Brand, Advertising, Branding, and Promotion

Table 7: Confidential-expenditure and CEO tenure

Variable	<i>Confidential-expenditure_t</i>	
	(1)	(2)
<i>Short CEO Tenure 4 Years_t</i>	0.009*** (2.586)	
<i>Short CEO Tenure 3 Years_t</i>		0.006* (1.924)
Control Variables	Yes	Yes
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
<i>N</i>	26,184	26,184
Adjusted R ²	0.412	0.412

➤ Short-tenure CEOs tend to **withhold advertising expenditures** with high certainty to avoid monitoring and unwanted questions.

Table 7: Confidential-expenditure and CEO tenure

Panel B Subsample analysis of industries with high and Low CEO turnover				
	<i>Confidential-expenditure_t</i>			
	High Industry CEO Turnover	Low Industry CEO Turnover	High Industry CEO Turnover	Low Industry CEO Turnover
	(1)	(2)	(3)	(4)
<i>Short CEO Tenure 4 Years_t</i>	0.013*** (3.093)	0.002 (0.354)		
<i>Short CEO Tenure 3 Years_t</i>			0.010** (2.366)	0.001 (0.138)
Control Variables	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
<i>N</i>	15,757	10,427	15,757	10,427
Adjusted <i>R</i> ²	0.361	0.475	0.361	0.475

Table 8: The Interplay between CEO Tenure, Advertising Rivalry, and Confidential Advertisers

Panel A Confidential-expenditure and CEO tenure

	<i>Confidential-expenditure_t</i>	
	(1)	(2)
<i>Short CEO Tenure 4 Years_t</i>	0.009*** (2.615)	
<i>Short CEO Tenure 3 Years_t</i>		0.006* (1.953)
<i>High Fluidity Indicator_t</i>	0.010** (2.137)	0.010** (2.129)
Constant	Yes	Yes
Control Variables	Yes	Yes
Year FE	Yes	Yes
Firm FE	Yes	Yes
N	26,184	26,184
Adjusted R ²	0.413	0.412

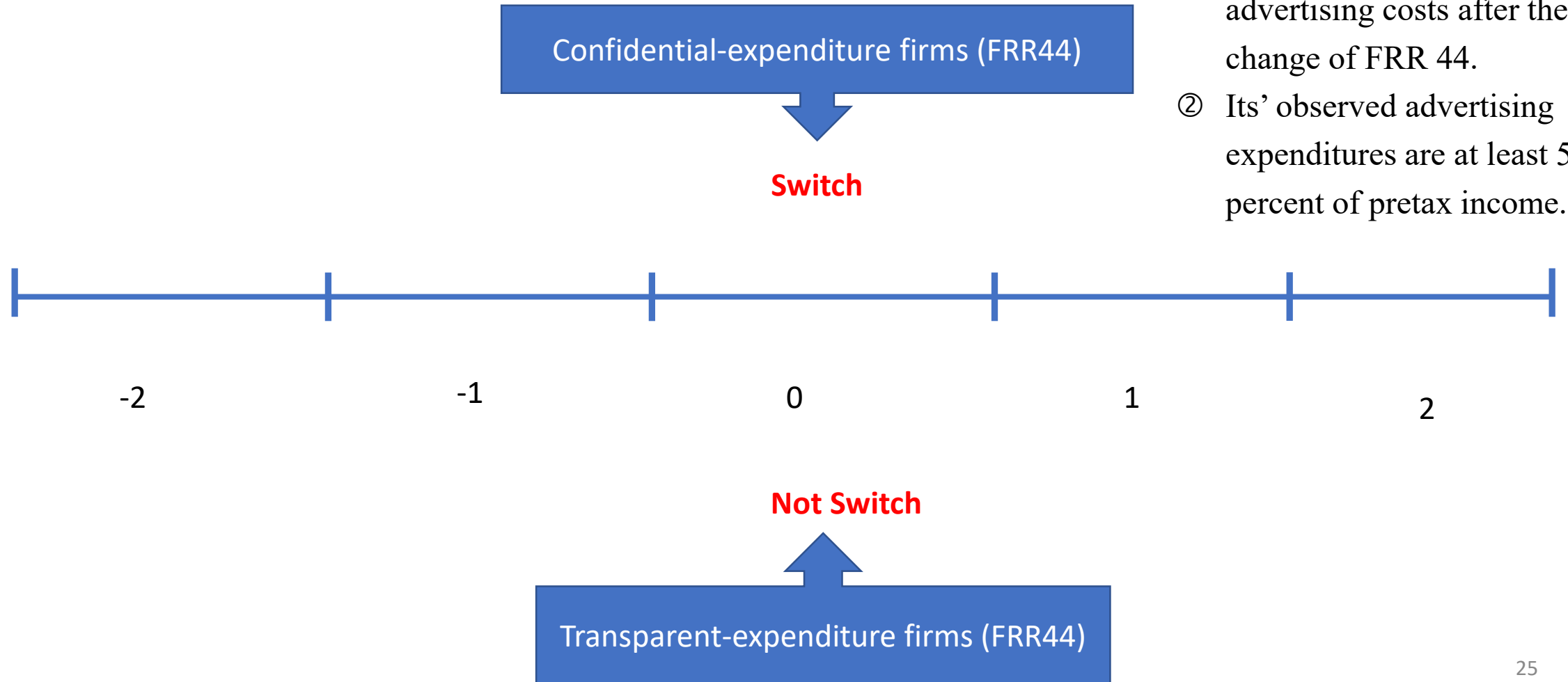
➤ Proprietary Costs
 ➤ Hoberg et al. (2014)

Table 8: The Interplay between CEO Tenure, Advertising Rivalry, and Confidential Advertisers

Panel B Subsample analysis of industries with high CEO turnover and of industries with low CEO turnover

	<i>Confidential-expenditure_t</i>			
	High Industry CEO Turnover (1)	Low Industry CEO Turnover (2)	High Industry CEO Turnover (3)	Low Industry CEO Turnover (4)
<i>Short CEO Tenure 4 Years_t</i>	0.013*** (3.111)	0.002 (0.371)		
<i>Short CEO Tenure 3 Years_t</i>			0.010** (2.378)	0.001 (0.165)
<i>High Fluidity Indicator_t</i>	0.006 (0.839)	0.015** (2.299)	0.006 (0.824)	0.015** (2.298)
Constant	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
<i>N</i>	15,757	10,427	15,757	10,427
Adjusted <i>R</i> ²	0.361	0.475	0.361	0.475
F	2.185	1.978	1.702	1.957

DiD: Financial Reporting Release No.44



- ① A firm **stopped** revealing its' advertising costs after the change of FRR 44.
- ② Its' observed advertising expenditures are at least 5 percent of pretax income.

DiD: Financial Reporting Release No.44

- The switching decision doesn't raise firm value.
- Analyst forecast dispersion significantly increases, and outlooks become more pessimistic for firms that switch to aggregating advertising expenses.
- Positive and significant coefficients show that short CEO tenure influences switching decisions.
- CEOs in firms with confidential expenditures show more net purchases.

Conclusion

1. Our results provide evidence that separate advertising expense information benefits investors.
 - FASB began the project “Disaggregation—Income Statement Expenses ” to improve the decision usefulness in February 2022 .
2. Analysts’ efforts do not fully compensate for the lack of transparency, suggesting that disaggregation enhances the credibility of information.
3. Managerial interests may influence disclosure practices, highlighting the significance of disaggregated accounting data in addressing managerial dysfunctional behavior.

Thank you!

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