

Earnings Management to sustain Consecutive Earnings Increases & Market Response

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Motivation

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Previous literature: Importance of an earnings string (a pattern of consecutive earnings increases) to firms for market premium

1. Possibility of Earnings management for achieving an earnings string?
2. Market response to such earnings management activities?
3. Accrual management (AM) vs. Real activity management (RM)?

Research Questions



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- What is the pattern of AM or RM by ES firms along an earnings string and the break of the string?

Predictions: (1) Increases in both AM and RM near the end

(2) Decreases in AM but a moderate level of RM at the break

- How does the capital market react to AM or RM by ES firms?

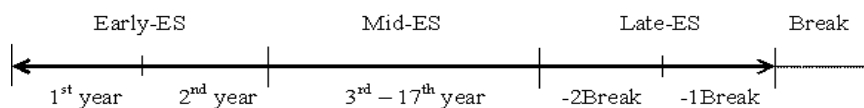
Predictions: incremental ERC would be negative for AM but insignificant for RM

Research Design 1 (EM Pattern)



$$Y = \beta_0 + \beta_1 \cdot \text{MidES} + \beta_2 \cdot -2\text{Break} + \beta_3 \cdot -1\text{Break} + \beta_4 \cdot \text{Break} + \text{Control Variables} + \epsilon$$

- Dependent variable (Y): measure of AM (Discretionary accruals) or RM (-1 times abnormal discretionary expenses)
- Test Variable: Four periods of an earnings string (early, mid, two separate years of late ES period) and the break year



- Prediction:
 β_2 and β_3 : positive in both AM & RM regressions
 β_4 : negative in AM regression vs. insignificant in RM regression

Research Design 2 (Market Response)



$$Y = \beta_0 + \beta_1 \cdot \Delta E + \beta_2 \cdot DACC^{PM}_H \cdot \Delta E (\beta_2 \cdot RDISX^{PM}_H \cdot \Delta E) + Control + \epsilon$$

- Dependent variable (Y): Market-adjusted BHAR
- Test Variable: Incremental ERC on high AM or high RM activities
 ΔE - Earnings Changes
 $DACC^{PM}_H$ (or $RDISX^{PM}_H$) - a proxy for high AM (RM) group
- Control Variable: Growth, Risk etc.
- Prediction:
 β_2 (incremental ERC on high AM group): negative
 β_2 (incremental ERC on high RM group): insignificant

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Results 1 (EM Pattern)



Y_{it}	AM ($DACC^{PM}$)			RM ($RDISX^{PM}$)		
	Coeff.	t-stat	p-value	Coeff.	t-stat	p-value
Test Variable						
<i>MidES</i>	0.0113	2.20	0.0283	0.0264	1.97	0.0486
<i>-2Break</i>	0.0274	4.48	<.0001	0.0368	2.25	0.0125
<i>-1Break</i>	0.0386	5.65	<.0001	0.0462	2.65	0.0041
<i>Break</i>	-0.0230	-3.05	0.0012	0.0213	1.19	0.1175
Adj. R²	13.38%			2.47%		
N	8,234 obs. (1,043 firms)			8,234 obs. (1,043 firms)		

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Results 2 (Market Response)



	AM ($DACC^{PM}$)			RM ($RDISX^{PM}$)		
	Coeff.	<i>t</i> -stat	<i>p</i> -value	Coeff.	<i>t</i> -stat	<i>p</i> -value
Test Variable						
$DACC^{PM}_{H*\Delta E}$	-0.5252	-3.94	<.0001			
$RDISX^{PM}_{H*\Delta E}$				0.0391	0.32	0.7507
Adj. R²		8.56%			8.27%	
N		6,575 obs. (949 firms)			6,575 obs. (949 firms)	

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Results



1. Significant increases in both AM and RM near the end of an earnings string: empirical evidence of earnings management to sustain an earnings string
2. Significant decreases in AM at the break: Accrual reversal and/or Big-bath
No significant reduction in RM at the break since reduction in RM needs more cash and investment opportunities.
3. Significant negative incremental ERC on aggressive AM activities, but insignificant for RM activities: capital market discounts its rewards for aggressive AM activities but not for RM activities.

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Contributions



1. Providing evidence of earnings management to sustain a pattern of consecutive earnings increases
2. Contributing to reveal a firm's strategic use of AM and RM
2. Analyzing market consequences of AM and RM