

DISCRETIONARY EXPENDITURES MODELS

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Discretionary Expenditures

- **Net Income = Cash Earnings + Non-cash Earnings**
- **Managers can manipulate cash earnings by delaying or accelerating real expenditures, especially those that must be expensed immediately (i.e., not capitalized)**
 - Research & Development
 - Advertising
 - Selling, General, & Administrative
 - Maintenance, training, travel, etc.
- **“Real Earnings Management” does not violate securities laws and is viewed by managers as more ethical**
 - But, it must be done well in advance of the end of the period
- **Real Earnings Management is hard to detect**
 - Did managers have a legitimate reason to delay expenditures due to performance?

Model of Discretionary Expenditures

- Normal expenditures are a function of last year's expenditures, revenues, and growth
- We'll model change in expenditures (current year – prior year)
 - We'll use prior year's revenue growth and prior year's revenue
 - Normal expenditures are budgeted based on prior year's results
 - Using prior years ensures that model is not affected by current year sales manipulation
 - Everything is deflated by Prior Total Assets
- **Change in Expenditures = $\alpha + \beta \text{ * Prior Sales Growth} + \chi \text{ * Prior Sales} + \varepsilon$**
 - Expenditures = SG&A Expense, R&D Expense, or Advertising Expense
 - Use industry-year regressions to get estimated a, b, and c parameters
 - Normal change in expense = $a + b \text{ * Prior Sales Growth} + c \text{ * Prior Sales}$
- **Discretionary Expenditures = Total Change in Expense – Normal Change in Expense**

