REVENUE RECOGNITION RED FLAGS: REVENUE BEFORE CASH COLLECTION

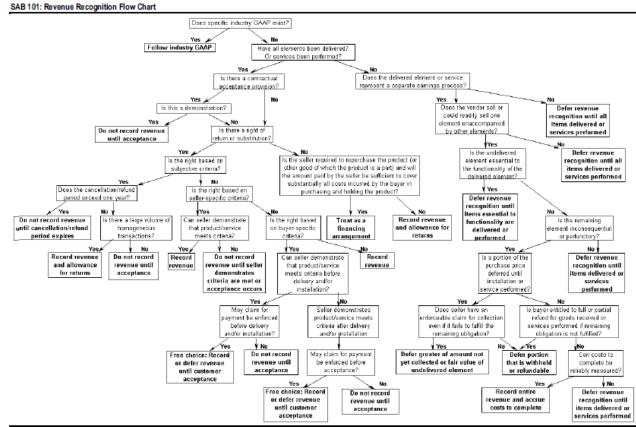
Professor Brian Bushee



Revenue Recognition

- Revenue is recognized when it is both:
 - Earned (i.e. goods or services are provided) and
 - Realizable (i.e. price is fixed and collection of cash is probable)
- Revenue can be recognized before cash collection ("noncash revenue")
 - At delivery of goods or services, increase Revenue and Accounts Receivable
 - At time of cash collection, increase Cash reduce Accounts Receivable
- Watch for acceleration of revenue into current period
 - Recognize before full delivery
 - Provide right of return if not resold by customer
- 50% of SEC enforcement actions are related to revenue recognition

SAB 101: Simplified Flow Chart



Source: Bear, Steams & Co. Inc.

Revenue Recognition Red Flags

- We will use red flags to identify potential changes in revenue recognition policies
 - Unusual seasonally-adjusted quarterly trends
 - Growth in Revenue
 - Growth in Accounts Receivable
 - Unusual trends in Ratios
 - Days Receivable and Accounts Receivable/Revenue
 - Revenue per Capacity Unit
- Then, we will try to find what happened
 - Do earnings management incentives exist?
 - Is there anything unusual in the Revenue Recognition policy?

Year-over-year Revenue Growth Trends

- Growing firms tend to have revenue growth in all four quarters, whereas earnings management is more likely to happen in a specific quarter
- Most firms have some seasonality in revenue during year, so need to compare to same quarter the prior year
- YoY (Year over year) Revenue Growth
 - (Revenue this quarter Revenue same quarter last year) / Revenue same quarter last year
- Benchmarks
 - Time-series: is growth unusual in one specific quarter for the firm?
 - Cross-sectional: is growth unusual for the industry in a given quarter?

Year-over-year Growth in Accounts Receivable

- Noncash revenue is accompanied by changes in Accounts Receivable (AR)
- YoY Growth in AR
 - (AR end of this quarter AR end of same quarter last year) / AR end of same quarter last year
- Benchmarks
 - Time-series: is growth unusual in one specific quarter for the firm?
 - Cross-sectional: is growth unusual for the industry in a given quarter?
 - Revenue: how much of revenue growth is noncash?
 - · Compare to growth in revenue and growth in cash collected
 - Cash Collected = (Revenue + Beginning AR) Ending AR

Ratios

Days Receivable

- Large increase could indicate spike in noncash revenue at end of quarter
- Annual Data => (Average AR / Annual Revenue) * 365
- Quarterly Data => (Average AR past 5 quarters / TT Revenue) * 365
 - TT = Trailing Twelve months = sum of past four quarters

Accounts Receivable/Revenue

- Large increase could also indicate a spike in noncash revenue
- AR/Revenue = AR / TT Revenue

Revenue per Capacity Unit

- Large increase could indicate fraudulent revenue that is beyond normal capacity of company to produce
- Revenue per employee = TT Revenue / Number of employees
- Revenue per PP&E = TT Revenue / Gross PP&E

Pawsome Electronics Case

- Pawsome Electronics manufactures consumer products for dogs
 - Microchip-enabled food bowls, electric toothbrushes, soothing-sound machines, electric blankets, aromatherapy vaporizers
- Sell products to retail stores and to on-line retailers
 - No direct sales to customers
- Pawsome was struggling in 2012-3
 - Hired a new CEO who was a turnaround expert
- Changes in 2013-4
 - Increased marketing budget
 - Implemented new "just-in-time" automatic retail delivery arrangements
 - Reduced product line to focus on "winners"
 - Closed 18 of 26 factories
 - Cut workforce from 12,000 to 7,500 employees

Pawsome Electronics Case

- Pawsome has awesome turnaround in performance in 2014
 - Revenues up 19%, Net income of \$123 million vs. net loss of \$196 million in 2013
 - Stock price has risen 59 percent
 - Eight security analysts have "buy" or "strong buy" recommendations
- TV pundits are spreading rumors about the company
 - Rumors that company is looking to acquire other companies
 - Rumors that CEO got a job offer from another company
- Does Pawsome have any earnings management incentives?
- Are there any red flags in the ratios?

Pawsome Conclusion

- Pawsome's CEO engaged in a channel-stuffing scheme
 - Manipulated automatic "just-in-time" system to deliver extra goods to retailers just before quarter end
 - Increased revenue, but all noncash
 - Retailers returned excess inventory to Pawsome
 - Returns happened in the next quarter
- Pawsome used high stock price to acquire two other companies
 - Doubled size of company
- Some analysts raised concerns about high growth in AR
- Auditor questioned the revenue recognition practices in prior year
 - Pawsome had to restate prior results to remove questionable revenue
- Pawsome's reputation took a hit with customers and investors
 - Filed for bankruptcy within three years of scheme
 - Eventually acquired by DogWorld Industries

WHARTON ONLINE

