Financial Accounting Recitation 2

MIT Sloan School of Management

Key concepts for this recitation

- Revenue recognition principles & examples
- Allowance accounting – bad debt expense and accounts receivable

Old Revenue Recognition Principles

Earnings = Revenues – Expenses

Old Revenue Recognition Intuition:

- Earned: Earnings process substantially complete
- Collectible: Cash collection reasonably assured

Expenses matched to revenues by matching principle

Question 1: Revenue Recognition

Topic: Timing of revenue recognition for gift cards

Question: Almost all retailers now offer gift cards. When should retailers recognize revenue for gift cards? What about the portion of cards that go unredeemed?

Support your answers with reasoned arguments.

Solution 1: Revenue Recognition Intuition

Intuition What conditions must be met for revenue recognition?

1. It is earned / service is provided or delivered
2. Collectability is reasonably assured

For gift cards: 1) cash is collected when the gift card is sold (not an issue), **BUT** 2) has revenue been earned?

- For gift cards that are used: recognize revenue when the good or service is provided (i.e. when gift card is used)
- For gift cards that are unused:
  - sits in unearned revenue until card expires when it is recognized as revenue **OR**
  - company makes an estimate based on historical usage of how much the remainder of the card would not be used and recognize revenue at that point

Question 2: Revenue Recognition

A. On June 1st 2018, Boeing closes an agreement with Lufthansa to deliver 50 new planes in 2019. Each airplane sells for $200 million.

- How much revenue should be recognized in June 2018?
  - None, revenue has not been earned as delivery has not occurred.

B. On December 1st you close a contract worth $20,000 in consulting services. You agree to provide 50% of the service in December and 50% in January. Note service is “delivered” ratably over December – January. The client pays the full fee on December 1st.

- How much revenue should be recognized in December 31st?
  - No rev rec on 12/1
  - 50% of “unearned revenue” becomes revenue on 12/31

Question 2 (cont'd): Revenue Recognition

C. During the month of July you sell $40,000 in goods to customers. You give them 60 days to pay their bills. All of your customers are reliable payers.

- How much revenue do you recognize in July?
  - $40,000 – Revenue is earned and collectability is reasonably assured

Question 3: Revenue Recognition

Background: Tootsie Roll receives royalty revenue related to licensing fees generated from other companies using the Tootsie Roll trademark.

Assume that on 12/31/2007 Tootsie Roll received $4,975 in cash from a European Company to use their trademark for the next two years (i.e. 2008 and 2009).

The legal costs associated with this transaction were $1,349 and Tootsie Roll paid these costs on 12/31/2007.

Tootsie Roll's accounting policy for this type of transaction is to record all of the revenue when the cash is received and match the expenses to the revenue.

The company has a fiscal year end on December 31.

Question 3 (cont'd): Revenue Recognition

A. Use the Balance Sheet Equation to identify the transaction Tootsie Roll recorded on 12/31/2007.

Assets	=	Liabilities	+	Equity
Cash				Retained Earnings
$4,975				$4,975 (Royalty Rev)
$(1,349)				$(1,349) (Legal Exp)

Question 3 (cont'd): Revenue Recognition

B. Suppose instead they decided to spread the revenue and costs associated with the royalty payment over the two-year contract, again matching the expense to the revenue. Use the Balance Sheet Equation to identify the transaction Tootsie Roll recorded on 12/31/2007.

	Assets	=	Liabilities	+	Equity
Cash	Prepaid Expenses		Deferred Revenue		
$4,975			$4,975		
$(1,349)	$1,349				

Question 3 (cont'd): Revenue Recognition

C. Assuming the facts in part (b), use the Balance Sheet Equation to identify the transaction Tootsie Roll recorded on 12/31/2008.

On 12/31/2008, **half** of the deferred revenues are realized and half of the prepaid expenses are incurred:

- 12/31/2007 Deferred Revenue: $4,975 → Portion realized in 2008: $2,487.5
- 12/31/2007 Prepaid Expenses: $1,349 → Portion to expense in 2008: $674.5

	Assets	=	Liabilities	+	Equity
Cash	Prepaid Expenses		Deferred Revenue		
			$(2,487.5)		$2,487.5 (Royalty Rev)
	$(674.5)				$(674.5) (Legal Exp)

Types of Revenue Recognition Questions to Prepare For

What should you do with returns?

- Depends on the company's policies but similar to AR/ADA
- Except it's a liability – Liability for return allowances

Conceptual Questions

- Stick to your accrual accounting principles!
- Read and understand footnotes from company financials about their recognition policies

Bad Debts

Two ways of accounting for bad debts:

- the direct method, and
- the allowance method.

We will focus on two allowance methods:

- The percentage of sales method.
- The aging method.

Allowance accounts: matching principle revisited

Matching Principle is the idea that expenses should be matched to their revenues

Allowance accounts are used when we **estimate** future expenses.

We will focus on: Allowance for Doubtful Accounts (ADA)

Allowance for Doubtful Accounts (ADA)

Allowance for Doubtful Accounts (ADA):

- a contra asset account associated with Accounts Receivable (A/R).
- (Gross A/R – ADA) = Net Realizable Value of A/R

When ADA is used, the company anticipates that some accounts will be uncollectible in advance of knowing the specific account or amount.

- Bad debt expense is often an **estimate** to more closely match the sale → increases relevance but lowers reliability

Allowance for doubtful accounts

There are two methods of estimating the allowance for doubtful accounts:

The percentage of sales method estimates expected losses as a percentage of credit sales made during the period.

- Intuition: the more you sell, the more likely a loss.

The aging method estimates expected losses based on the age of the receivables.

- Intuition: the longer you have not been paid, the less likely you are to be paid.

The BASE equation for changes in balance sheet amounts

Every balance sheet account uses the same BASE equation:

Beginning balance (for example, ADA)

+ **A**dditions (for example, bad debt expense)

\- **S**ubtractions (for example, write-offs)

= **E**nding balance

Note:

The percentage of sales method gives bad debt expense, allowing us to compute the ending balance.

Aging analysis gives the ending balance, allowing us to compute bad debt expense.

Key Terms and Usage

Term	Definition	Impact on financial statements
Accounts receivable	Customer purchases’ made on account (i.e. you will receive a payment later)	I/S: Revenue is recognized when earned, not received B/S: Asset account impacted
Allowance for doubtful accounts	Company provisions for uncollectible A/R	I/S: Depends on how it changes B/S: Contra-asset account impacted
Bad debt expense	Future projections for uncollectible A/R	I/S: Expense recognized as % of sales B/S: Increase ADA account by same amount
Write-off	A/R that “goes bad” in that time period (i.e. it becomes clear that the customer cannot pay)	I/S: No impact B/S: Reduce ADA and A/R

Common 10-K Formatting

		Fiscal Year Ended	
		February 1, 2019	February 2, 2018
			(in millions)
Trade Receivables - Allowance for doubtful accounts:			
Balance at beginning of period	Beginning ADA **(B)**	$ 103	$ 57
Provision charged to income statement	Bad Debt Expense **(A)**	77	60
Bad debt write-offs	Amount deemed uncollectible **(S)**	(95)	(14)
Balance at end of period	Ending ADA **(E)**	$ 85	$ 103
Customer Financing Receivables - Allowance for financing receivable losses:			
Balance at beginning of period	Beginning ADA **(B)**	$ 145	$ 143
Provision charged to income statement	Bad Debt Expense **(A)**	95	103
Charge-offs, net of recoveries (a)	Amount deemed uncollectible **(S)**	(104)	(101)
Balance at end of period	Ending ADA **(E)**	$ 136	$ 145

Question 4: Accounts Receivable
Ruddick Corp.'s 2012 annual report

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VALUATION AND QUALIFYING ACCOUNTS AND RESERVES
For the Fiscal Years Ended
October 2, 2012, October 2, 2011
and October 3, 2010 (in thousands)

COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E
DESCRIPTION	BALANCE AT BEGINNING OF FISCAL YEAR	ADDITIONS CHARGED TO COSTS AND EXPENSES	DEDUCTIONS	BALANCE AT END OF PERIOD
Fiscal Year Ended October 3, 2010:				
Reserves deducted from assets				
to which they apply -				
Allowance For Doubtful Accounts	$2,634	$775	$1,019*	$2,390
Fiscal Year Ended October 2, 2011:				
Reserves deducted from assets				
to which they apply -				
Allowance For Doubtful Accounts	$2,390	$164	$1,083*	$1,471
Fiscal Year Ended October 2, 2012:				
Reserves deducted from assets				
to which they apply -				
Allowance For Doubtful Accounts	$1,471	$556	$379*	$1,648

* Represents accounts receivable balances written off as uncollectible, less recoveries.

Note: Ruddick Corp. was the parent company that owned Harris Teeter grocery stores in 2012.

Question 4 (cont'd): Accounts Receivable

Question A: For the year ended October 2, 2012, how much bad debts expense did Ruddick Corp recognize on its Income Statement? How much Accounts Receivable did Ruddick Corp write off?

COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E
DESCRIPTION	BALANCE AT BEGINNING OF FISCAL YEAR	ADDITIONS CHARGED TO COSTS AND EXPENSES	DEDUCTIONS	BALANCE AT END OF PERIOD
Fiscal Year Ended October 3, 2010: Reserves deducted from assets to which they apply - Allowance For Doubtful Accounts	$2,634	$775	$1,019*	$2,390
Fiscal Year Ended October 2, 2011: Reserves deducted from assets to which they apply - Allowance For Doubtful Accounts	$2,390	$164	$1,083*	$1,471
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Bad debt expense = $556,000

Write off = $379,000

Question 4 (cont'd): Accounts Receivable

Question B: How does bad debt expense change from 2010 to 2011? Assume that Ruddick Corp. uses the percentage of sales method to calculate bad debt expense. For what reasons might the change in bad debt expense have occurred?

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Question 4 (cont'd): Accounts Receivable

Question B: How does bad debt expense change from 2010 to 2011? Assume that Ruddick Corp. uses the percentage of sales method to calculate bad debt expense. For what reasons might the change in bad debt expense have occurred?

- Bad debt expense decreased from $775,000 in 2010 to $164,000 in 2011
- Potential reasons for lower bad debt expense in 2011 include:
  - Ruddick Corp. may use a new lower estimate of the uncollectible accounts resulting from improved collections
  - It may make lower sales in 2011
  - Ruddick Corp. management could intentionally reduce the bad debt expense in 2011