

# Accounting 15.515 Session 4

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- ▶ Revenue Recognition
- ▶ Accounts Receivable
- ▶ Deferred Revenue

# Why do we care about revenue recognition?

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- ▶ **We want to understand how Net Income is computed so we can interpret this performance measure. Revenue is obviously a big part of Net Income**
- ▶ **Statistical Evidence: over 40% of SEC enforcement actions on accounting issues deal with Revenue Recognition**
- ▶ **Anecdotal Evidence: Recent experience of Bristol-Myers**
  - "In another setback for the beleaguered drug maker, Bristol-Myers Squibb Co. confirmed that the Securities and Exchange Commission has opened an inquiry into whether it improperly inflated revenue last year by as much as \$1 billion through use of sales incentives... Drug makers, like many other manufacturers, can boost near-term sales by extending lower prices to wholesalers, encouraging them to load up. But such "channel-stuffing" hurts later sales." (*The Wall Street Journal*, 7/12/2002)

# Criteria for Revenue Recognition

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- ▶ Under accrual accounting, a firm recognizes revenue when it has:
  - 1) Performed all, or a substantial portion of, the services to be provided.
  - 2) Incurred a substantial majority of the costs, and the remaining costs can be reasonably estimated.
  - 3) Received either cash, a receivable, or some other asset for which
    - a reasonably precise value can be measured
    - collectibility is reasonably assured.

# Importance of Accounts Receivable

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<u>Industry</u>	<u>Receivables</u> <u>Total Assets</u>
Eating Places	1.6%
Family Clothing Stores (The GAP)	3.0
Race Track Operations	3.1
Grocery Stores	4.9
Intel	8.6
Semiconductors	11.3
Advertising Agencies	42.7
Trans. Freight/Cargo	43.1
Computer Software Wholesale	45.5
Overall Median	13.0%

Source: 5,933 industrial firms from 2000 Global Vantage

# Allowance for Bad Debts (Uncollectibles)

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## ► Methods

- Direct Method
- Percentage of Sales
- Aging

## ► How might a firm's choice of method evolve over time?

# Balance Sheet Account Formulas and their Income Statement Components

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Accounts Receivable (Asset)

Beginning Balance

+ **Credit Sales**

- Cash Collected

- Amounts Written Off

+ Reinstatements

= Ending Balance

-Allowance for doubtful  
Accounts (Contra Asset)

Beginning Balance

+**Amounts Recorded as  
Bad Debt Expense**

- Amounts Written Off

+ Reinstatements

= Ending Balance

# Parallels between Bad Debts and other Accrued Expenses

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	Cash	+ A/R	- ADA	Acc. = Liab.	Ret. + Earn
Accrue Expense				50 K	(50)K
Pay Liability	(50)K			(50)K	
Accrue Bad Debts			50 K		(50)K
Write Off Accounts		(50)K	(50)K		

# Problem E6-7

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See Problem E6-7 on pages 272-3 of the course textbook.



# Problem E6-7 (continued)

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	AR	-ADA	L	CC	RE
BB					
Sales					
Write-Off					
Bad Debt Expense					
EB					

# Allowance for Returns

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- ▶ If customer has the right to return the product, the seller must estimate the dollar value of returns.
- ▶ Revenue is reported net of the amount expected to be returned.
- ▶ Typically, seller sets up a contra-asset account, *Allowance for Returns*:
  - Analogous to Allowance for Doubtful Accounts
  - When return actually occurs, reduce both Allowance and face value of Accounts Receivable (or Cash) by the invoice amount.
  - Return has no effect on Net Income, nor on Net Assets, just as Write-off of Uncollectible has no effect on these amounts.
  - BSE:  $AR - \text{Allowance for Returns} = RE$
- ▶ Intel takes a slightly different approach: *Deferred Income Liability*.

# Deferred Income: An Example

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**Shipments on 3/1 to OEMs and Distributors:**

**Total Billings:**



**COGS:**



- Return / Price Protection expires for \$35K of sales on 3/31
- Invoice Price is reduced from \$35K to \$25K on the remainder of shipment on 4/15

# Deferred Income: An Example

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	AR + INV	Deferred Income + RE
OEM sales		
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Distrib. Sales		
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PP Expires For \$35K		
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PP Applies For 35K		

# Reverse Engineering: How much Cash did Intel Collect from Customers in 2002?

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Reverse Engineering process:

- ▶ Identify Relevant Balance Sheet Accounts: A/R, Allowance for Doubtful Accounts, Deferred Income
- ▶ Identify the activities that affect these accounts:
  - Recognizing sales revenue as A/R
  - Recognizing bad debt expense
  - Writing off uncollectible accounts
  - Invoicing products that affect the Deferred Income Liability
- ▶ Obtain amounts from the Financial Statements, notes, other
  - i.e., Intel's Bad Debt Expense (\$10M) and Write-offs (\$21) are disclosed in its 10-K report filed with the SEC, but not in the annual report.
- ▶ Set up BSE template and “plug” the remaining numbers

# Determining Intel's Cash Collections

	Cash	+AR	-ADA	+OA	=Def Inc	+RE
<b>Begin Balance</b>		<b>2,675</b>	<b>68</b>		<b>418</b>	
Sales Revenue						
Bad Debt Expense						
Write-Offs						
Change in Def Inc						
Cash Collected						
<b>End Balance</b>		<b>2,631</b>	<b>57</b>		<b>475</b>	

# Summary Points

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## ▶ Criteria for recognizing revenue (Earned and Collectible)

Collectibility: Match expected bad debts to the period in which the sales occur

- Distinguish between Bad Debt Expense and Write-Offs
- Methods for estimating Bad Debts / Uncollectible Accounts

Right of Return: match expected returns to the sales period, or more conservatively, defer revenue recognition until return protection / price protection ends

## ▶ Reverse Engineering: infer the activities that underlie a firm's reported financial results