

# Final Review & Course Wrap-Up



15.501/516 **Accounting**  
Spring 2004

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Sloan School of Management  
Massachusetts Institute of Technology

**May 12, 2004**



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# Final Exam Administration



- Cheat sheet: “Two sides of a single sheet of size A4 paper”.
  - Size A4 is what your handouts are printed on.
- You may put down anything you wish, including latest Red Sox scores.
- No other reference material is allowed, including cheat sheets of neighboring students.
- Calculators are allowed, laptops are not.
- Students writing Final Exam must have name tags in front of them.

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# Exam Structure



- Exam *structure* will be somewhat similar to Practice Final 1
- Approximately 30% of Total Final Exam points on Managerial Accounting
- Rest on Financial Accounting
- What to expect
  - Anything discussed in class, unless explicitly excluded.
  - Exam is primarily computational.
  - But expect questions on concepts and issues.

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## Exam Structure



- What not to expect
  - Any question on a case not discussed in class.
  - Detailed numerical questions on Destin Brass or Seligram.
  - Questions directly asking to set up T-accounts. (Knowing T-accounts will make it easy to answer many of the questions asked.)
  - Multiple choice questions as in Practice Final 2 – but they are still useful in clearing up concepts

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## Practice Exams



- Best practice exams for Financial Accounting Section
  - Midterm 1
  - Midterm 2
- Best practice exams for Managerial Section
  - Practice Final 1
  - Destin Brass & Highlighted Issues in Seligram
- Additional practice
  - Practice Final 2

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## Issues Common to Financial and Managerial Accounting



- Both involve allocations
  - Financial: allocations of revenues and expenses across periods
  - Managerial: primarily allocations of costs across cost objects (e.g., products, departments)
- Allocations are always both:
  - Systematic and rational
  - Arbitrary and subjective
- There is no substitute for human judgment.

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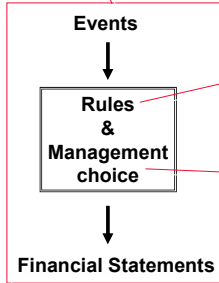
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## Financial Accounting Overview



**Financial Accounting = translates events into financial statements**



**Generally Accepted Accounting Principles (GAAP)**

**Management selects from alternative rules and from allowable estimates under GAAP**

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## Approach in Financial Accounting



- First, we identified the key Balance Sheet Equation
- Next, we understood the accrual process to determine income on Income Statement.
- Subsequently, we spent time understanding key accounts that appear under different Balance Sheet headers and how they interact with the Income Statement.
- We also examined the Cash Flow Statement – the information it contains and how it relates to the Income Statement and Balance Sheet items

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## Balance Sheet Equation



- **Assets = Liabilities + Owners equity**
- Assets = probable future economic benefits owned by the firm
- Liabilities = probable future economic sacrifices
- Owners' Equity = Assets – Liabilities  
owners' claim = "own" – "owe"
  - (Owners' Equity is sometimes also called shareholders' equity, net book value, or the "residual claim")

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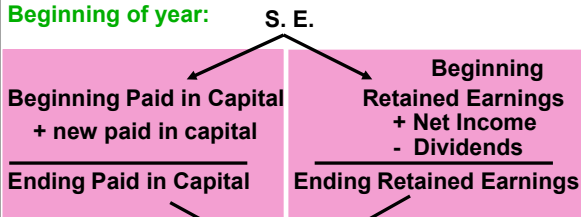
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## Changes in Shareholders' Equity



Beginning of year:



End of year:

S. E.

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## Basic Principles of Accrual Accounting



- Determine what net income has been *earned* during a period, not just what cash has been generated during the period from operations
  - Why? To capture the economic events that have occurred during the period
- Determine revenues applying the revenue-recognition principles
- Report as expenses those costs that *have been* or *will be* incurred to generate those revenues

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## Revenue Recognition



- Revenue recognition principles: Service has been provided by the company, customer has been billed and there is reasonable certainty of cash collection
- Issues in revenue recognition
  - Credit sales
  - Warranties and returns
  - Bill & hold sales, SAB 101

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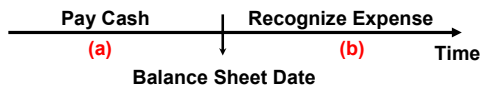
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## Accruals and Cash flows: Four Cases



### 1) Cash precedes expense



Examples: Rent paid in advance, Prepaid Insurance, PP&E, Inventory

Associated entries:

	(A)	=	(SE)
	Cash	Prepaid Rent	Ret. Earn.
(a)	-\$	+\$	
(b)		-\$	-\$ (rent expense)

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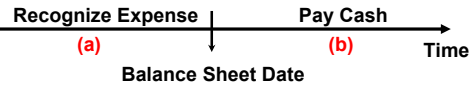
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## Accruals and Cash flows: Four Cases



### 2) Cash follows expense



Examples: Taxes paid after yearend, Salaries paid on the 15th of the month, bad debt expense, warranty expenses

Associated entries:

(A)	=	(L)	(SE)
<u>Cash</u>		<u>Salaries Payable*</u>	<u>Ret. Earn.</u>
(a) +\$		+\$	-\$ (salary expense)
(b) -\$		-\$	

\* sometimes also called "accrued salaries"

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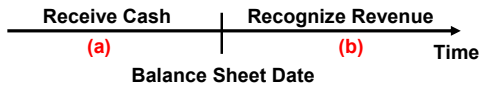
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## Accruals and Cash flows: Four Cases



### 3) Cash precedes revenue



Examples: Airplane tickets sold in advance  
Newspaper subscriptions sold in advance

Associated entries:

(A)	=	(L)	(SE)
<u>Cash</u>		<u>Unearned Revenue*</u>	<u>Ret. Earn.</u>
(a) +\$		+\$	\$ (revenue)
(b) -\$		-\$	

\*sometimes also called "deferred revenue"

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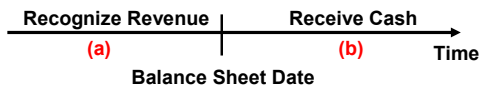
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## Accruals and Cash flows: Four Cases



### 4) Cash follows revenue



Examples: Accounts Receivable  
Goods shipped but cash not yet received  
Services provided but cash not yet received

Associated entries:

(A)	=	(A)	(SE)
<u>Cash</u>		<u>Accounts Receivable</u>	<u>Ret. Earn.</u>
(a) \$		+\$	+\$ (revenue)
(b) -\$		-\$	

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## Balance Sheet - Assets



- Current assets
  - Cash
  - Marketable Securities
  - Accounts Receivable, less: Allowance For Doubtful Accounts
  - Inventories
  - Prepaid Rent
- Long term assets
  - Fixed assets, less: Accumulated Depreciation
  - Long-term Investments
  - Goodwill

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## Balance Sheet – Liabilities and Stockholders Equity



- Current Liabilities
  - Accounts Payable
  - Salaries Payable
  - Deferred Tax Liabilities
- Long term liabilities
  - Bonds Outstanding
  - Lease Obligations
- Stockholders equity
  - Capital Stock
  - Retained Earnings
  - Other Equity

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## Prior Review Slides



- Please look at review slides for Midterms 1 & 2 for key issues under each major header

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## Cash Flow Statements



- Change in net cash =  
Operating cash flows +  
Investing cash flows +  
Financing cash flows
- Given two, you should be able to work out the third
- Two methods: Indirect and Direct
- For the exam: Only Indirect

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## The Indirect Method



- Operating
  - Start with Net Income
  - Make adjustments to arrive at CFO (cash flow from operations or operating cash flows)
- Investing
  - Purchase of PPE and/or other long-term assets (outflows)
  - Proceeds from sale of PPE and/or other long-term assets (inflows)
- Financing
  - Dividends paid (outflows)
  - Issuance of securities (inflows)
  - Retirement of securities (outflows)

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## Operating Cash Flows (CFO)



- Net Income includes non-cash revenues and non-cash expenses
  - These non-cash revenues/expenses usually are captured in changes in operating current assets and operating current liabilities (recall the two-sidedness of all entries)
  - Step 1: Identify operating **non-cash** current assets and operating current liabilities
  - Step 2: Identify non-cash revenues or expenses that do *not* affect operating current assets or operating current liabilities (example: Depreciation Expense)
  - Step 3:
    - Start with net income
    - Add /(subtract) to it any non-cash expense /(revenue) that does not affect operating current assets or operating current liabilities\*\*
    - Subtract /(add) any increase /(decrease) in **non-cash** operating current assets
    - Add /(subtract) any increase /(decrease) in operating current liabilities
    - Arrive at CFO
- \*\* Sometimes transactions that have cash consequences are similarly adjusted out of the operating section because they are not considered a result of operating activities.

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## Managerial Accounting



- The focus of the Managerial Accounting Section has been on Cost Accounting for decision-making
- Allocation of costs is an important factor that affects product profitability and pricing decisions
- Two major allocation systems have been covered in class: Traditional Costing System and Activity-Based Costing (ABC) Systems
- The major issue in traditional costing systems is their continuous evolution as business realities change.
- The major issue in ABC is the identification of objective cost drivers.

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## Pitfalls To Watch Out For In Costing Systems



- With traditional costing
  - Death spirals – a direct result of using an allocation system that is “incorrect” either because it is outdated or excessively simple.
- With ABC
  - The sensitivity of cost allocations to choice of cost drivers.
  - The lack of acceptance by internal managers, especially if ABC shows them in a poor light
  - The tendency to accept easier solutions than the ones demanded as a result of ABC analysis.

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