

Module 2

Accounting Statements and Finance

FINE 3010, Financial Management
Prof. Renping Li, Tulane University

Why Do We Need Accounting?

- Three accounting questions relevant for finance

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 2. What do firms owe?
 - Pre-existing commitments to pay lenders, suppliers, etc.

Why Do We Need Accounting?

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1. What do firms own?
 - Real assets (tangible, intangible) and financial assets (cash, securities)
 2. What do firms owe?
 - Pre-existing commitments to pay lenders, suppliers, etc.
 3. How much money did firms make?
 - Income? Cash flow?

Example, Is Anthropic Profitable?

- Is Anthropic profitable in Q2 2026?



CNBC, August 18, 2026 (3:50),
“Anthropic tells investors annualized
revenue run rate climbed to \$65
billion in July”

Example, Is Anthropic Profitable?

- Is Anthropic profitable in Q2 2026?
- We will have a clear understanding after this module



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Three Financial Statements

- **Balance sheet**
 - What do firms own and owe at a point in time



Three Financial Statements

- **Balance sheet**
 - What do firms own and owe at a point in time
- **Income statement**
 - How much did firms earn in the past year



Three Financial Statements

- **Balance sheet**
 - What do firms own and owe at a point in time
- **Income statement**
 - How much did firms earn in the past year
- **Statement of cash flows**
 - Cash inflows and outflows during the past year



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- **SEC**, the federal agency that regulates U.S. securities markets and enforces disclosure



sec.gov/edgar/search

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Goals

- Interpret the information contained in the balance sheet, income statement, and statement of cash flows

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- Distinguish between market and book values
- Explain why income differs from cash flow
- Understand the essential features of the taxation of corporate and personal income

Module 2, Part 1

The Balance Sheet

Balance Sheet

- **Balance sheet**, assets, liabilities, and equity at a point in time

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$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

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Where does the balance sheet come from?

- Recall from **Module 1**, businesses sell financial assets (financing) to purchase real assets (investment)

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- The numbers are the cost of acquiring real assets, or the amount raised from selling financial assets
- The numbers stay at the transaction amount, even when the asset is worth more or less later

Example, Issuing Stock to Build a Data Center (\$ Billions)

1. Today			
Cash	1	Liabilities	0
Fixed assets	0	Shareholders' equity	1
Total assets	1	Total liabilities and equity	1

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Example, A Business (\$ Millions)

Current assets

Assets that can generate return within one year

Assets

Current assets

Cash and marketable securities	2,600
Accounts receivable	500
Inventories	9,000
Total current assets	12,100

Fixed assets

Tangible fixed assets

Property, plant, equipment	48,200
Less accumulated depreciation	19,700
Net tangible fixed assets	28,500

Intangible asset	700
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Total fixed assets	29,200
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Total assets	41,300
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Obligations due within a year

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Total liabilities	21,400
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Retained earnings	13,600
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 - Bonds, debt from public bond markets
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Example, A Business (\$ Millions)

Most liquid	Assets		Liabilities and equity		Paid first
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	Accounts receivable	500	Accounts payable	9,900	
	Inventories	9,000	Total current liabilities	10,100	
	Total current assets	12,100	Long-term debt	11,300	
	Fixed assets		Total liabilities	21,400	
	Tangible fixed assets		Shareholders' equity		
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	Less accum. depreciation	19,700	Retained earnings	13,600	
	Net tangible fixed assets	28,500	Total shareholders' equity	19,900	
Least liquid	Intangible asset	700			Paid last
	Total fixed assets	29,200			
	Total assets	41,300	Total liabilities and equity	41,300	

- **Liquidity**, the ease of converting an asset into cash

Book Value vs. Market Value

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 - E.g., worth \$4 billion today → market value
- In general, book $\neq$ market value

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- How to measure book/market value of equity?

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- 1. Book value of equity = Book value of assets – Book value of liabilities
 - E.g., Apple in fiscal 2024,
 - Book value of assets, \$364,980 Mn
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 - What is the book value of equity?

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 2. Market value of equity = Market price of each share $\times$ Total shares outstanding
 - E.g., Apple at the end of 2024,
 - Share price, about \$250
 - Shares outstanding, 15,116 Mn
 - What is the market value of equity?

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 - E.g., Apple at the end of 2024,
 - Share price, about \$250
 - Shares outstanding, 15,116 Mn
 - What is the market value of equity?
 - Answer, $\$250 \times 15,116 \text{ Mn} = \$3,779,000 \text{ Mn}$

Book Value vs. Market Value

- How to measure book/market value of equity?
- 1. Book value of equity = Book value of assets – Book value of liabilities
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 - Book value of liabilities, \$308,030 Mn
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- Market value reflects the money investors expect Apple to make in the future

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- $\$41,300 = (\$10,100 + \$11,300) + \underline{\hspace{2cm}}$
- $\$41,300 = \$21,400 + \$19,900$

Quick Summary

- Accounting conveys information to investors and stakeholders
- The balance sheet, what a company owns and how it financed it
- Left side (assets) must equal right side (liabilities + equity)
- Market and book values generally differ

Module 2, Part 2

The Income Statement

Income Statement

1. **Revenues**, sales made in the period, whether or not cash was collected

	\$ Million
Revenues	78,100
Cost of goods sold	54,900
Selling, general & administrative (SG&A) expenses	16,200
Depreciation	2,400
Earnings before interest and income taxes (EBIT)	4,600
Interest expense	500
Taxable income	4,100
Taxes	900
Net income	3,200
Allocation of net income	
Dividends	1,300
Addition to retained earnings	1,900

Income Statement

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Income Statement

- In accounting, a sale and the costs behind it are recorded in the same period, the one the sale transaction happens in



The illustration shows a red line graph with a downward trend, indicating a decrease in value over time. Below the graph are four stacks of blue coins, each with a dollar sign on top, representing the value of the asset. The background is light blue with a grid pattern and several small dollar signs scattered around.

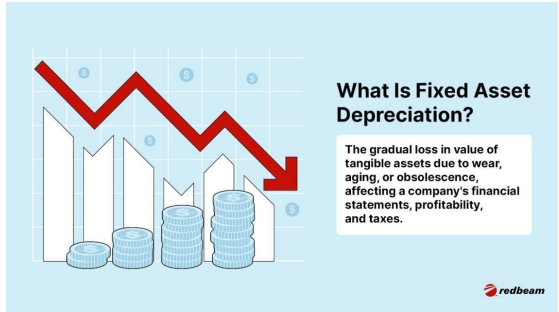
What Is Fixed Asset Depreciation?

The gradual loss in value of tangible assets due to wear, aging, or obsolescence, affecting a company's financial statements, profitability, and taxes.

 redbeam

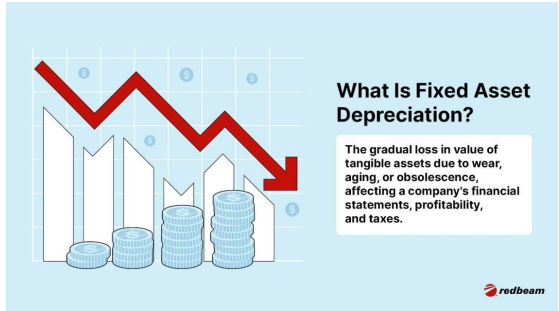
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- This spreading is **depreciation**



Where Net Income Goes

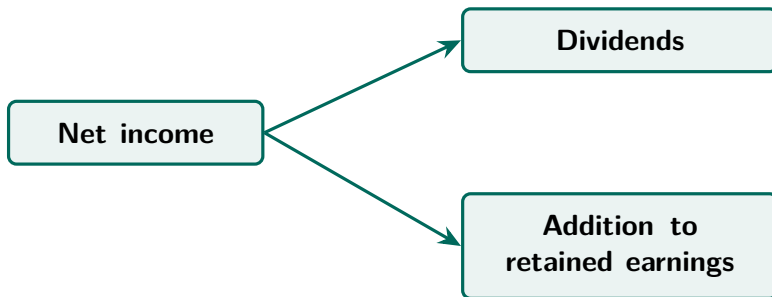
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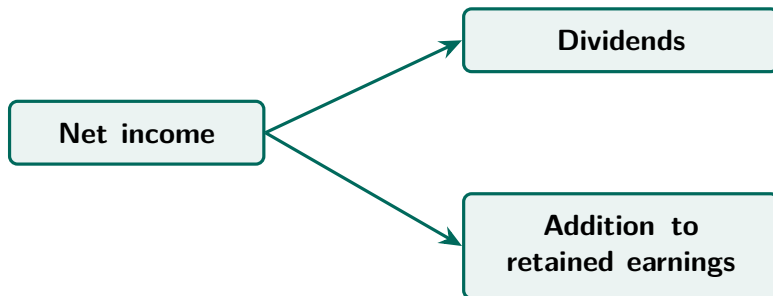
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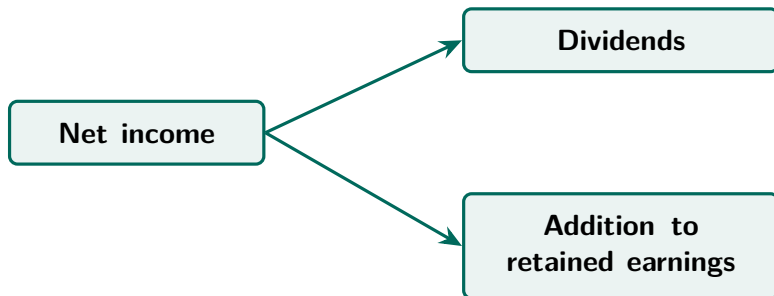
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- **Dividends**, cash paid out to shareholders now
- **Addition to retained earnings**, profit kept in the business and reinvested on the shareholders' behalf

Income Statement, A Memory Aid

Line item	Letters	Remember it as
Revenues	R	Rainbow
Cost of goods sold	C	Candy
SG&A expenses	S	Sells
Depreciation	D	Dependably
EBIT	E	Especially
Interest expense	I	In
Taxable income	T.I.	Texas Incorporated
Taxes	T	Texas
Net income	N.I.	Never Incorporates
Dividends	D	During
Addition to retained earnings	R.E.	Re-Elections

Example, Is Anthropic Profitable?

- Is Anthropic profitable in Q2 2026?



CNBC, August 18, 2026 (3:50),
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Example, Is Anthropic Profitable?

- Is Anthropic profitable in Q2 2026?
- Profitable on an **EBITDA** basis
 - EBITDA, earnings before interest, taxes, depreciation, and amortization
- Not profitable on a **net income** basis



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Practice Problem

	\$
Revenues	?
Cost of goods sold	20,000
SG&A expenses	10,000
Depreciation	8,000
EBIT	12,000
Interest expense	?
Taxable income	?
Taxes (tax rate = 21%)	2,100
Net income	7,900
Dividends	2,500
Addition to retained earnings	?

Practice Problem

	\$
Revenues	50,000
Cost of goods sold	20,000
SG&A expenses	10,000
Depreciation	8,000
EBIT	12,000
Interest expense	2,000
Taxable income	10,000
Taxes (tax rate = 21%)	2,100
Net income	7,900
Dividends	2,500
Addition to retained earnings	5,400

Quick Summary

- The income statement, what a company accomplished over a period
- The order of line items matters greatly
- Mixing it up has drastic consequences
 - Taxes should always be computed **after** depreciation and interest, never before

Module 2, Part 3

The Statement of Cash Flows

Statement of Cash Flows (SOCF)

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 - **Financing activities**, cash raised from lenders and shareholders, and cash returned to them

Statement of Cash Flows

- Two methods to construct the SOCF

Statement of Cash Flows

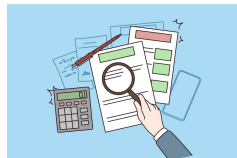
- Two methods to construct the SOCF

Direct method	Indirect method
Lists every cash receipt and payment	Starts from net income and adjusts it
Shows day-to-day cash activity clearly	Uses numbers already in the other statements
More time-consuming to prepare	Faster to prepare
Rarely used in practice	The common choice

Direct →



Indirect →



Statement of Cash Flows

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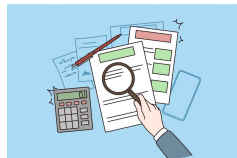
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Direct →



Indirect →



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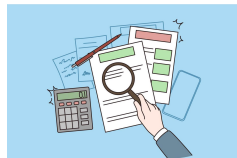
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- Both methods give the same totals
- We will follow the indirect method, starting from net income in the income statement

Direct →



Indirect →



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- The firm pays \$2 billion for a data center that lasts 5 years

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Cash flow (\$ billions)	-2.0	0	0	0	0	0
Effect on net income	0	-0.4	-0.4	-0.4	-0.4	-0.4

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- Net income never records money raised from financing activities

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- The firm spends \$60 million producing AI control panels
- None of them have been sold yet



Neowin, July 2026, "OpenAI launches a \$230 physical control panel for managing Codex agents"

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- So the cash tied up in unsold inventory never shows up in net income



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- The firm pays down the \$30 million



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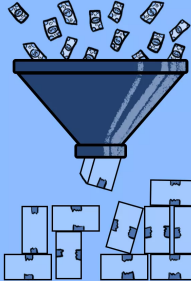


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Operating Activities

Steps to calculate cash flow from operating activities,

1. **Start** with net income
2. **Add** depreciation
3. **Subtract** change in net working capital (NWC)
 - $\text{NWC} = \text{accounts receivable} + \text{inventories} - \text{accounts payable}$



Cash Flow From Operating Activities

[kash 'flō 'frām 'ä-pə-,rā-tiŋ ak-'ti-və-tē]

The amount of money a company brings in from its ongoing, regular business activities, such as manufacturing and selling goods or providing a service to customers.

 Investopedia

Operating Activities

A business's statement of cash flows for the year
(figures in millions of dollars)

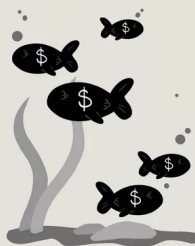
Cash flow from operating activities	
Net income	3,200
Depreciation	2,400
Changes in working capital items	<u>-1,200</u>
Cash flow from operating activities	<u>6,800</u>

Investing Activities

Investing activities show cash flows from,

1. Capital purchased and sold

- **Capital**, long-term productive (real) assets
- e.g., machinery, plant, land...
- Cash flow is negative if firms acquire capital



Cash Flow From Investing Activities

['kash 'flō 'frəm in-'vest-ɪŋ ak-'ti-və-tēz]

One of the sections on the cash flow statement that reports how much cash has been generated or spent from various investment-related activities in a specific period.

 Investopedia

Investing Activities

A business's statement of cash flows for the year
(figures in millions of dollars)

Cash flow from investing activities	
Capital expenditure	−3,000
Sales of long-term assets	100
Other investing activities	100
Cash flow from investing activities	−2,800

Financing Activities

Financing activities show cash flows from,

1. Selling new shares (+ cash)
2. Paying dividends (− cash)
3. Taking new debt, either a loan or a bond (+ cash)
4. Repaying principal amount of old debt (− cash)



Cash Flow From Financing Activities (CFF)

*['kash 'flō 'frəm fə-'nan(t)-siŋ
ak-'ti-və-tēs]*

A section of a company's cash flow statement, which shows the net flows of cash that are used to fund the company.

 Investopedia

Quick Summary

- The statement of cash flows, the company's cash inflows and outflows
- Cash flow from operating activities
 - $\text{Net income} + \text{depreciation} - \text{change in NWC}$
- Cash flow from investing activities
- Cash flow from financing activities

Practice Problem

- Which of the following will make cash flow higher than net income for a firm?
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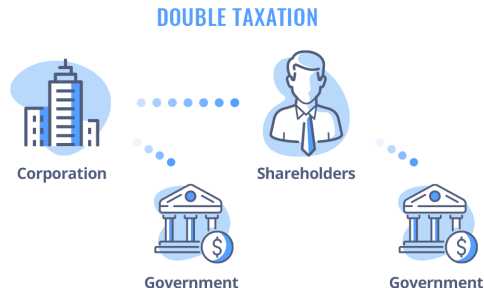
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- $= \$3,200 + \$2,400 - (-\$1,200) = \$6,800$ million

Module 2, Part 4

Taxation

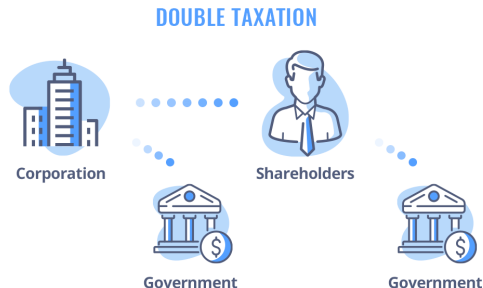
Corporate Taxation, Double Taxation

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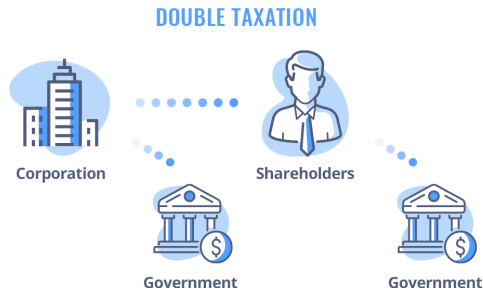
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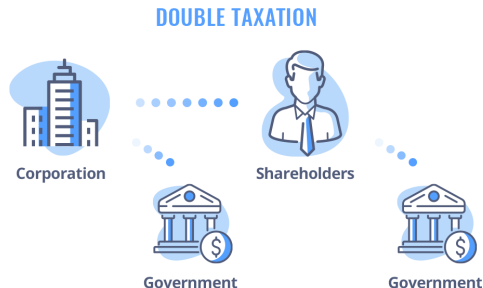
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Corporate Taxation, Double Taxation

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 - The corporation pays tax on its income
 - Shareholders pay tax again on what they receive
- This is **double taxation**
- So corporations care a lot about cutting the first round of tax



Corporate Taxation, The Tax Rate

- The U.S. federal corporate tax rate is **21%**



WSJ, February 28, 2025 (6:57),
“Economists on How Trump’s 2017
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Corporate Taxation, Tax Shields

- Depreciation and interest come first

Income statement

Revenues

Cost of goods sold

SG&A expenses

Depreciation

EBIT

Interest expense

Taxable income

Taxes

Net income

Corporate Taxation, Tax Shields

- Depreciation and interest come first
- Taxes come last

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Corporate Taxation, Tax Shields

- Depreciation and interest come first
- Taxes come last
- Depreciation and interest reduce corporate taxes

Income statement

Revenues

Cost of goods sold

SG&A expenses

Depreciation

EBIT

Interest expense

Taxable income

Taxes

Net income

Corporate Taxation, Tax Shields

- Interest expense can
 - act as a “shield” against corporate taxation
 - increase the *total* cash flow to investors (debt and equity investors combined)
- Investors get \$87.4 in total with debt, \$79 without
- Should a firm take on as much debt as possible? No (bankruptcy costs).

A. Has debt

EBIT	\$100	
Interest expense	\$40	→ debt investors
Taxable income	\$60	
Taxes (tax rate = 21%)	\$12.6	
Net income	\$47.4	→ equity investors

B. No debt

EBIT	\$100	
Interest expense	\$0	→ debt investors
Taxable income	\$100	
Taxes (tax rate = 21%)	\$21	
Net income	\$79	→ equity investors

Corporate Taxation, Tax Shields

- Depreciation can also
 - act as a “shield” against corporate taxation
 - increase the total cash flow to investors

Income Statement (\$ Million)

	Baseline	
Revenues	78,100	
Cost of goods sold	54,900	
SG&A expenses	16,200	
Depreciation	2,400	
EBIT	4,600	
Interest expense	500	
Taxable income	4,100	
Taxes	900	
Net income	3,200	

Corporate Taxation, Tax Shields

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- Example, Suppose a business has an *additional* \$100 million in depreciation, and its tax rate is 21%

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Income Statement (\$ Million)

	Baseline	More depreciation
Revenues	78,100	78,100
Cost of goods sold	54,900	54,900
SG&A expenses	16,200	16,200
Depreciation	2,400	2,500
EBIT	4,600	4,500
Interest expense	500	500
Taxable income	4,100	4,000
Taxes	900	879
Net income	3,200	3,121

Corporate Taxation, Tax Shields

- Questions,
 - What would be the impact on net income?
 - What would be the impact on cash flow?

\$ Million	Baseline	More depreciation
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Add back depreciation	2,400	2,500
Cash flow	5,600	5,621

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- Answers,
 - Net income *falls* by \$79 million
 - Cash flow *rises* by $21\% \times \$100 \text{ million} = \21 million

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- Answers,
 - Net income *falls* by \$79 million
 - Cash flow *rises* by $21\% \times \$100 \text{ million} = \21 million
- Takeaway, depreciation cuts taxes, bad for earnings (i.e., net income) but good for investors

Practice Problem

- A business pays a 21% tax rate. Suppose it had an additional \$200 million in depreciation. By how much would its taxes fall? What about its total cash flow to investors?

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- A business pays a 21% tax rate. Suppose it had an additional \$200 million in depreciation. By how much would its taxes fall? What about its total cash flow to investors?
- Taxes fall by $21\% \times \$200 \text{ million} = \42 million

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- A business pays a 21% tax rate. Suppose it had an additional \$200 million in depreciation. By how much would its taxes fall? What about its total cash flow to investors?
- Taxes fall by $21\% \times \$200 \text{ million} = \42 million
- Cash flow to investors rises by the same \$42 million, the depreciation tax shield

Personal Taxation

- The following personal tax rates matter for salaried employees and non-corporate businesses

Taxable Income (Single Taxpayers)	Marginal Tax Rate (%)
\$0–\$9,525	10
\$9,526–\$38,700	12
\$38,701–\$82,500	22
\$82,501–\$157,500	24
\$157,501–\$200,000	32
\$200,001–\$500,000	35
\$500,001 and above	37

Personal Taxation, Average vs. Marginal Tax Rates

- Marginal tax rate = Tax rate that is applied to each extra dollar of income
- Average tax rate = Total taxes / Total income

Example, Average Tax Rate

Suppose your salary is \$150,000 per year. What would be your average tax rate according to the given tax schedule for single taxpayers?

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\$0–\$9,525	10
\$9,526–\$38,700	12
\$38,701–\$82,500	22
\$82,501–\$157,500	24
\$157,501–\$200,000	32
\$200,001–\$500,000	35
\$500,001 and above	37

- Total tax = $\$9,525 \times 10\% + \$ (38,700 - 9,525) \times 12\% + \$ (82,500 - 38,700) \times 22\% + \$ (150,000 - 82,500) \times 24\%$
- Average tax rate = $30,289.5 / 150,000 = 20.19\%$

Practice Problem

If a firm's net income is positive and its noncash expenses are positive, which of the following could account for a negative amount of cash provided by operations?

- a. Current assets decrease more than current liabilities decrease.
- b. Current assets increase more than current liabilities increase.
- c. Current assets decrease more than current liabilities increase.
- d. A large addition is made to plant and equipment.

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Practice Problem

Here are the 2021 and 2022 (incomplete) balance sheets for Newble Oil Corporation.

BALANCE SHEET AT END OF YEAR (Figures in \$ millions)					
Assets	2021	2022	Liabilities and Shareholders' Equity	2021	2022
Current assets	\$328	\$510	Current liabilities	\$300	\$258
Net fixed assets	1,380	1,510	Long-term debt	920	1,100

- What was shareholders' equity at the end of 2021 and 2022?
2021, 488 2022, 662
- If Newble paid dividends of \$185 million in 2022 and made no stock issues, what must have been net income during the year? **$174 + 185 = 359$**
- If Newble purchased \$385 million in fixed assets during 2022, what must have been the depreciation charge on the income statement? **$385 - 130 = 255$**

Quick Summary

- Interest and depreciation come before taxes, so both shield income from tax
- A tax shield is worth the tax rate times the deduction, leaving more cash for investors
- Marginal rate applies to each extra dollar of income, average rate is total taxes over total income

Income Statement

	\$ Million	% of Sales
Revenues	78,100	100.0%
Cost of goods sold	54,900	70.3%
SG&A expenses	16,200	20.7%
Depreciation	2,400	3.1%
EBIT	4,600	5.9%
Interest expense	500	0.6%
Taxable income	4,100	5.2%
Taxes	900	1.2%
Net income	3,200	4.1%
Allocation of net income		
Dividends	1,300	1.7%
Addition to retained earnings	1,900	2.4%

Key Takeaways

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- Three statements, what a firm owns and owes, what it earned, and how cash moved
- Book values are the cost of acquiring real assets or the amount raised from selling financial assets, market values are what things would sell for today
- Net income $\neq$ cash flow, add back depreciation, subtract the change in NWC
- Interest and depreciation shield taxes, leaving more cash for investors

Thank you!

Please let me know if you have any questions.