

ACC250: Intro to Financial Accounting
Ch10. Liabilities

Jaeyoon Yu, Ph.D.
Central Michigan University

- 1 Liabilities
- 2 Current liabilities
 - Deferred Revenues
 - Accounts payable
 - Notes payable
- 3 Noncurrent liabilities
- 4 Ratio analyses: Debt-to-asset ratio

Introductory illustration

EX. You opened a pizzeria. Complete journal entries for the transactions:

- Issued 100 shares to your family and raised \$10,000. Par value is \$1.

Cash (+A)	10,000
Common Stock, Par Value (+SE)	100
Additional Paid-in Capital (APIC) (+SE)	9,900 ¹

- Bought supplies on account for \$500.

Supplies (+A)	500
Accounts Payable (+L)	500

- Paid \$500 to settle the accounts payable for supplies.

Accounts Payable (-L)	500
Cash (-A)	500

- Bought inventories on account for \$2,000.

Inventory (+A)	2,000
Accounts Payable (+L)	2,000

¹Par value and APIC will be covered in Ch11.

- Paid \$2,000 to settle the accounts payable for inventories.

Accounts Payable (-L)	2,000
Cash (-A)	2,000

- Sold some pizza and recorded service revenues of \$3,000.

Cash (+A)	3,000
Service Revenue (+R, +SE)	3,000

- Some customers bought gift cards for \$1,000.

Cash (+A)	1,000
Deferred Revenue (+L)	1,000

- Gift cards used 10 days later for \$1,000.

Deferred Revenue (-L)	1,000
Service Revenue (+R, +SE)	1,000

- Borrowed \$10,000 from PNC.

Cash (+A)	10,000
Notes Payable (+L)	10,000

- Issued bonds to raise capital for expansion of \$50,000.

Cash (+A)	50,000
Bonds Payable (+L)	50,000

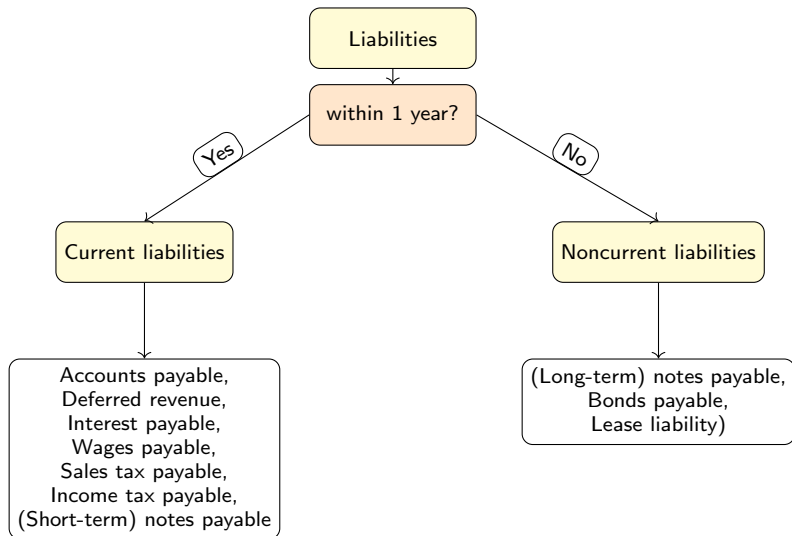
Liabilities

Obligations of a business that are expected to be settled in the future through the transfer of assets or services.


Characteristics of liabilities:

- probable future sacrifices of economic benefits.
- arising from past transactions or events.
- settled through the transfer of assets or services.

Liabilities - Classification



Liabilities

(in millions)		2022 Balance Sheet Excerpt	
<u>Assets</u>		<u>Liabilities and Stockholders' Equity</u>	
Current Assets		Current Liabilities	
Cash and Cash Equivalents	\$ 570	Accounts Payable	\$ 3,980
Accounts Receivable, Net	1,690	Accrued Liabilities (see  Exhibit 10.2)	1,550
Inventory	1,870	Notes Payable	810
Prepaid Rent and Other	<u>960</u>	Current Portion of Long-Term Debt	<u>1,675</u>
Total Current Assets	5,090	Total Current Liabilities	8,015
Land, Buildings, and Equipment	3,395	Long-Term Debt	9,135
Goodwill	14,380	Other Liabilities	<u>3,150</u>
Other Intangible Assets	7,000	Total Liabilities	20,300
Other Assets	<u>1,230</u>	Stockholders' Equity (summarized)	<u>10,795</u>
Total Assets	<u>\$31,095</u>	Total Liabilities and Equity	<u>\$31,095</u>

Accrued liabilities

Liabilities for expenses that have been incurred but not yet paid at the end of the accounting period.

(in millions)	2022
Accrued Advertising	\$ 75
Accrued Payroll	435
Accrued Taxes	30
Accrued Interest	70
Other	<u>540</u>
Total Accrued Liabilities	<u>\$1,550</u>

1 Liabilities

2 Current liabilities

- Deferred Revenues
- Accounts payable
- Notes payable

3 Noncurrent liabilities

4 Ratio analyses: Debt-to-asset ratio

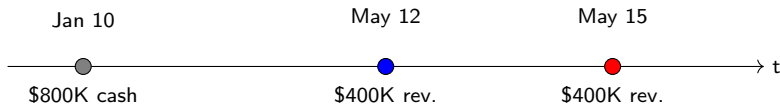
Deferred (Unearned) Revenues (Liability)

Cash received before the service is performed or the product is delivered.

- Cash received before the revenue is earned.
- A liability until the revenue is earned.
- Examples: advance ticket sales, subscriptions, and gift cards.



EX. On Jan 10, Live Nation received \$800,000 cash for advance ticket sales for two concerts to be held on May 12 and 15 of the same year. Prepare journal entries required on Jan 10, May 12, and May 15.



1 Jan 10:

Cash (+A)	800,000
Deferred Revenue (+L)	800,000

2 May 12:

Deferred Revenue (-L)	400,000
Sales Revenue (+R, +SE)	400,000

3 May 15:

Deferred Revenue (-L)	400,000
Sales Revenue (+R, +SE)	400,000

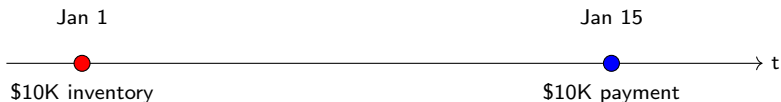
Accounts Payable (Liability)

Amounts owed to suppliers for products and services purchased on credit.

- Recorded as a liability when the goods or services are received.
- Paid off within a short period, usually 30 to 60 days.



EX. On Jan 1, a company purchases \$10,000 worth of inventory on credit. The company paid \$10,000 cash to the supplier on Jan 15. Prepare journal entries for both transactions.



1 Jan 1:

Inventory (+A)	10,000
Accounts Payable (+L)	10,000

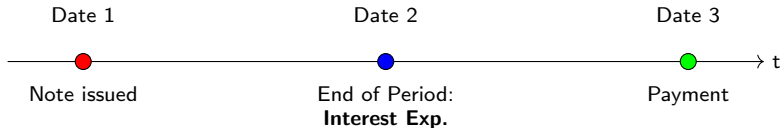
2 Jan 15:

Accounts Payable (-L)	10,000
Cash (-A)	10,000

Notes payable (Liability)

Written promises to pay to lenders (usually banks) a specific amount of money at a future date.

- Can be short-term (due within one year) or long-term (due after one year).
- Recorded as a liability when the note is issued.
- Interest expense is recorded periodically until the note is paid off.



Interest Expense (Expense)

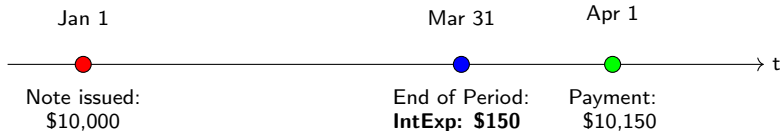
Interest incurred on loans or other borrowings during a period.

Interest Payable (Liability)

Interest owed on loans or other borrowings that has not yet been paid.

Short-term notes payable - Example 1

EX. A company borrows \$10,000 cash from a bank on Jan 1. The note has a 6% interest rate and is due in 90 days. The company will pay the principal and interest on Apr 1. This company prepares its financial statements quarterly (at the end of March, June, Sep, and Dec). Prepare necessary journal entries from the issuance of the note to the payment of the note at maturity, including adjustment journal entries.



- 1 How much borrowed? \$10000
- 2 How much interest expense would accrue monthly?
 $10,000 * 6\% * 1/12 = \$50$
- 3 Interest payable on the B/S as of March 31?
 $\$50 * 3 = \150

EX. A company borrows \$10,000 cash from a bank on Jan 1. The note has a 6% interest rate and is due in 90 days. The company will pay the principal and interest on Apr 1. This company prepares its financial statements quarterly (at the end of March, June, Sep, and Dec). Prepare necessary journal entries from the issuance of the note to the payment of the note at maturity, including adjustment journal entries.

1 Jan 1: Issuing a note

Cash (+A)	10,000
Notes Payable (+L)	10,000

2 Mar 31: Adjustment - Recognition of interest expense

Interest Expense (+E, -SE)	150
Interest Payable (+L)	150

3 Apr 1: Interest payment

Interest Payable (-L)	150
Cash (-A)	150

4 Apr 1: Principal payment

Notes Payable (-L)	10,000
Cash (-A)	10,000

The last two transactions, **interest payment and principal payment**, can be combined into one journal entry as follows:

Notes Payable (-L)	10,000
Interest Payable (-L)	150
Cash (-A)	10,150

Short-term notes payable - Example 2

EX. On Oct 31, 2021, General Mills (GM) borrowed \$100,000 cash on a one-year note that required GMs to pay 6% interest and the \$100,000 principal, both on Oct 31, 2022. GM prepares its financial statements on Dec 31. Prepare necessary journal entries.

- ① What is the principal amount / annual interest rate on the note / interest payment due?

\$100,000; 6%; Oct 31, 2022

- ② How much interest will GM pay on due date?

\$6,000 (= 100,000 * 6%)

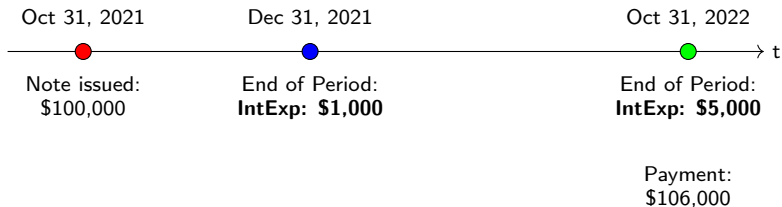
- ③ How much cash will General Mills pay on Oct 31, 2022 in total?

\$106,000 (= 100,000 principal + 6,000 interest)

- ④ How much interest expense should be recognized at the end of 2021?

\$1,000 (= 100,000 * 6% * 2/12, i.e., two-months interest)

EX. On Oct 31, 2021, General Mills (GM) borrowed \$100,000 cash on a one-year note that required GMs to pay 6% interest and the \$100,000 principal, both on Oct 31, 2022. GM prepares its financial statements on Dec 31. Prepare necessary journal entries.



EX. On Oct 31, 2021, General Mills (GM) borrowed \$100,000 cash on a one-year note that required GMs to pay 6% interest and the \$100,000 principal, both on Oct 31, 2022. GM prepares its financial statements on Dec 31. Prepare necessary journal entries.

- 1 Oct 31, 2021: Issuing a note

Cash (+A)	100,000
Notes Payable (+L)	100,000

- 2 Dec 31, 2021: Adjustment - Recognition of interest expense

Interest Expense (+E, -SE)	1,000
Interest Payable (+L)	1,000

- 3 Oct 31, 2022: Recognition of interest expense before payment

Interest Expense (+E, -SE)	5,000
Interest Payable (+L)	5,000

- 4 Oct 31, 2022: Interest payment

Interest Payable (-L)	6,000
Cash (-A)	6,000

- 5 Oct 31, 2022: Principal payment

Notes Payable (-L)	100,000
Cash (-A)	100,000

Transactions 3 and 4, **interest expense recognition before payment** and **interest payment**, can be combined into one journal entry as follows:

Interest Payable (-L)	1,000
Interest Expense (+E, -SH)	5,000
Cash (-A)	6,000

Explanation:

- \$1,000: Interest expense in 2021, held in Interest Payable until paid.
- \$5,000: Interest expense in 2022, recognized just before interest payment.
- \$6,000: Total interest payment made on Oct 31, 2022.

1 Liabilities

2 Current liabilities

- Deferred Revenues
- Accounts payable
- Notes payable

3 Noncurrent liabilities

4 Ratio analyses: Debt-to-asset ratio

Noncurrent liabilities

Obligations that are not expected to be settled within one year or the operating cycle, whichever is longer.

Examples:

- Long-term notes payable
- Bonds payable
- Lease liability

- 1 Liabilities
- 2 Current liabilities
 - Deferred Revenues
 - Accounts payable
 - Notes payable
- 3 Noncurrent liabilities
- 4 Ratio analyses: Debt-to-asset ratio

Debt-to-Asset Ratio

the proportion of a company's assets that are financed by debt.

Calculated as: $\frac{\text{Total Liabilities}}{\text{Total Assets}}$

Higher leverage means:

- Higher accounts payable; salaries payable; notes payable; interest payable, etc.
- So higher future cash outflows are expected.
- Liabilities must be paid off even if the firm does not generate enough cash flows.
- Higher risk of bankruptcy.

EX. A company has total liabilities of \$300,000 and total assets of \$500,000. Calculate the debt-to-asset ratio.

① Debt-to-Asset Ratio: $\frac{\$300,000}{\$500,000} = 0.6$ or 60%

② Interpretation: 60% of the company's assets are financed by debt.

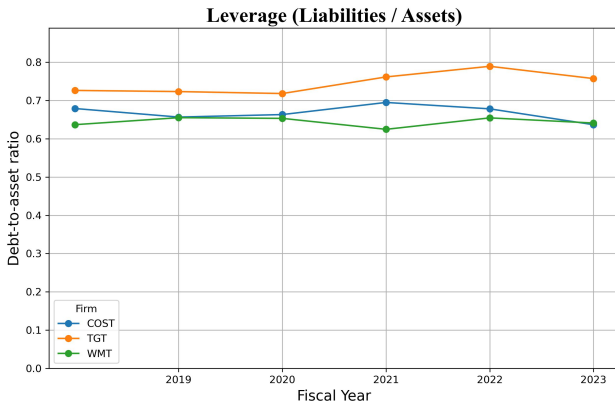
EX. Compare the debt-to-asset ratios of two companies:

- Company A: Total Liabilities = \$400,000, Total Assets = \$1,000,000
- Company B: Total Liabilities = \$600,000, Total Assets = \$800,000

Answers:

- 1 Company A's Debt-to-Asset Ratio: $\frac{\$400,000}{\$1,000,000} = 0.4$ or 40%
- 2 Company B's Debt-to-Asset Ratio: $\frac{\$600,000}{\$800,000} = 0.75$ or 75%
- 3 Interpretation: Company B has a higher debt-to-asset ratio, indicating higher financial leverage and potentially higher risk.

Debt-to-asset ratio of WMT, COST, and TGT



Inferences from the graph:

- TGT's leverage is slightly higher than WMT and COST, so higher risk.
- The ratios are stable over the years for these firms.