ACC250: Intro to Financial Accounting

Ch10. Liabilities

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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.

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

- Bought inventories on account for $2,000.

[1] Par value and APIC will be covered in Ch11.

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- Bought supplies on account for $500.

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

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

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- 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.

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Cash (+A)	10,000	
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- 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

[1] Par value and APIC will be covered in Ch11.

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

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

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

- 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.

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

- 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.

- 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.

- Borrowed $10,000 from PNC.

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

- 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.

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

- 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.

- 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

Liabilities

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

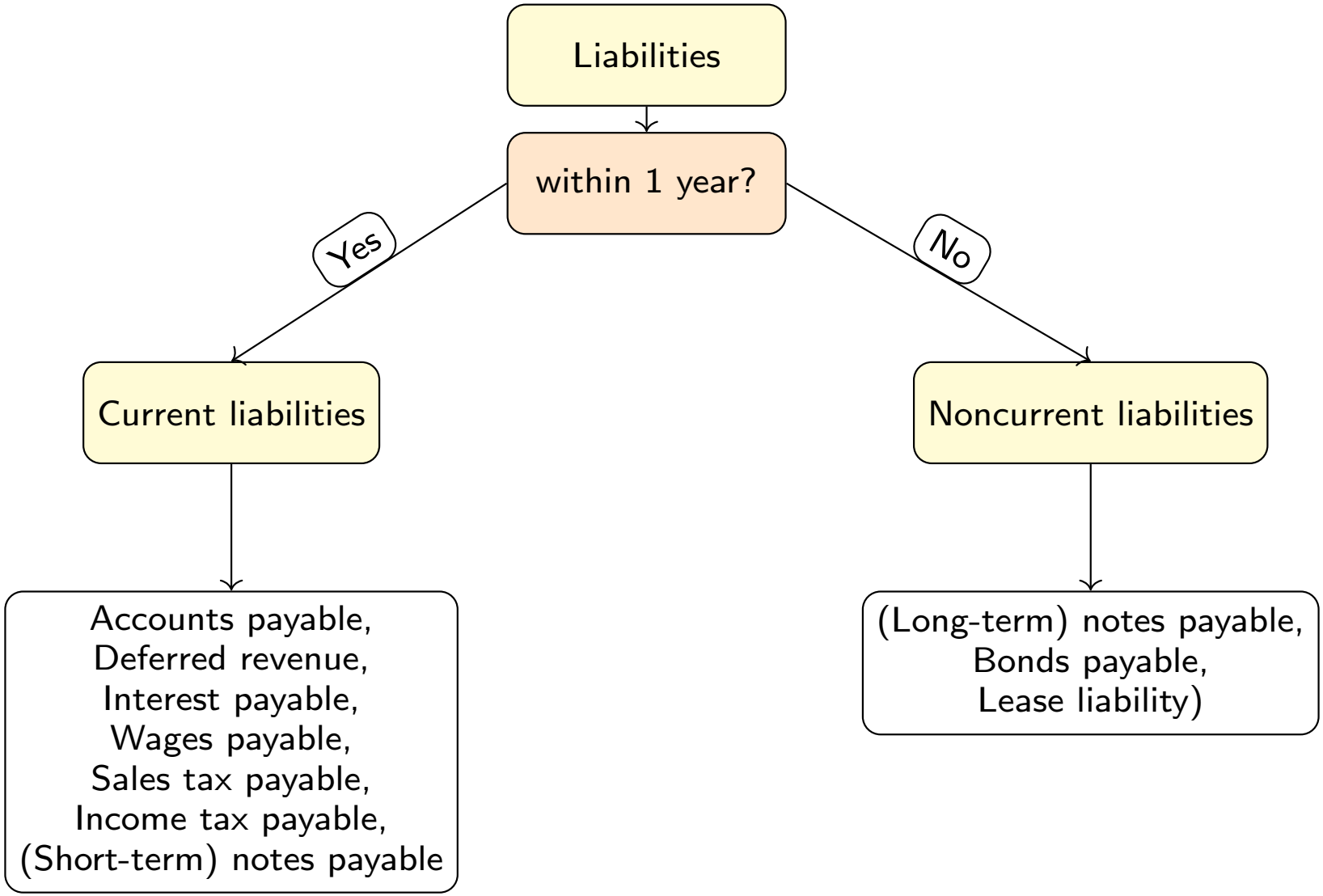
Liabilities

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		
Assets		**Liabilities and Stockholders' Equity**	
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	960	Current Portion of Long-Term Debt	1,675
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	3,150
Other Intangible Assets	7,000	Total Liabilities	20,300
Other Assets	1,230	Stockholders' Equity (summarized)	10,795
Total Assets	**$31,095**	Total Liabilities and Equity	$31,095

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	540
Total Accrued Liabilities	$1,550

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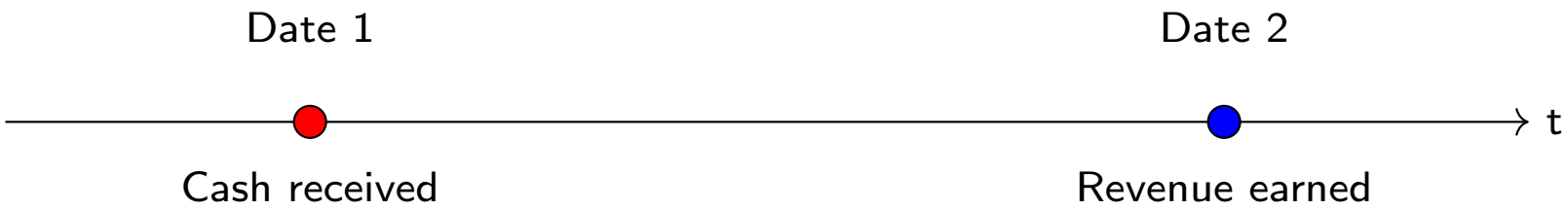
Deferred Revenues

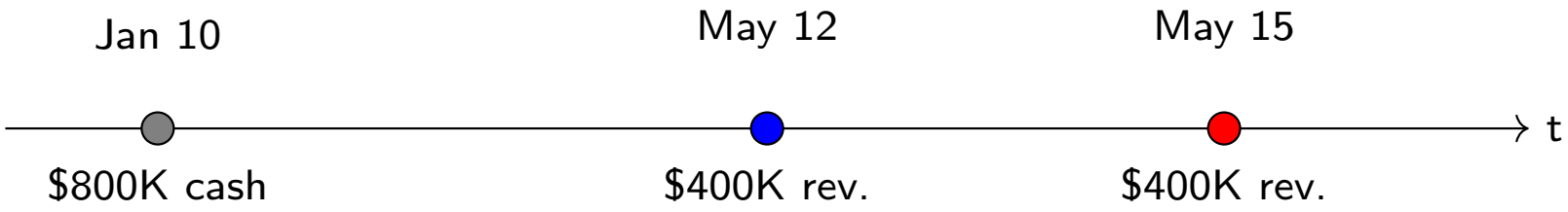
Deferred (Unearned) Revenues (Liability)

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.

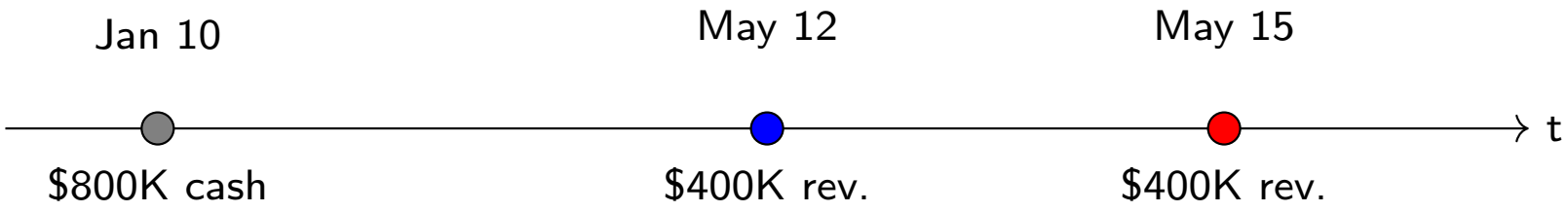


1. Jan 10:

2. May 12:

3. May 15:

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.



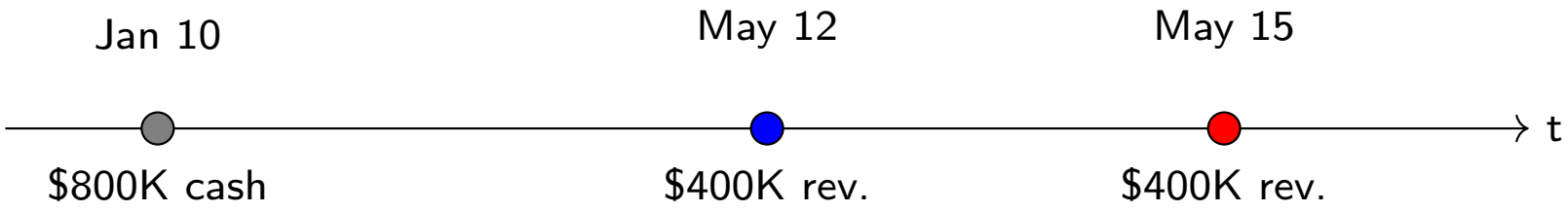
1. Jan 10:

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

2. May 12:

3. May 15:

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:

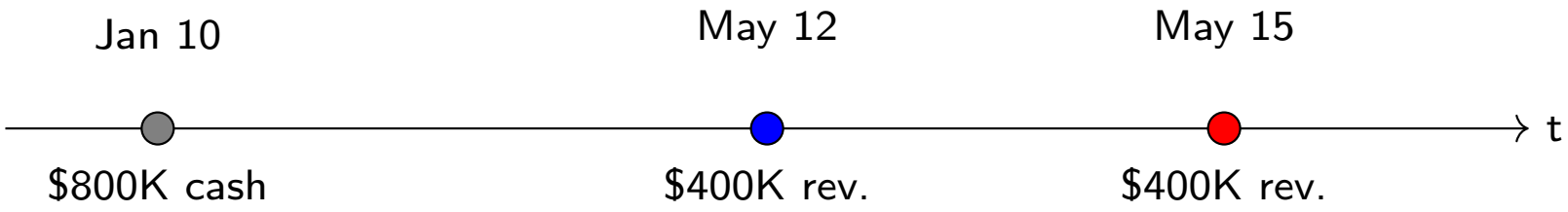
Cash (+A)	800,000	
Deferred Revenue (+L)		800,000

2. May 12:

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

3. May 15:

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:

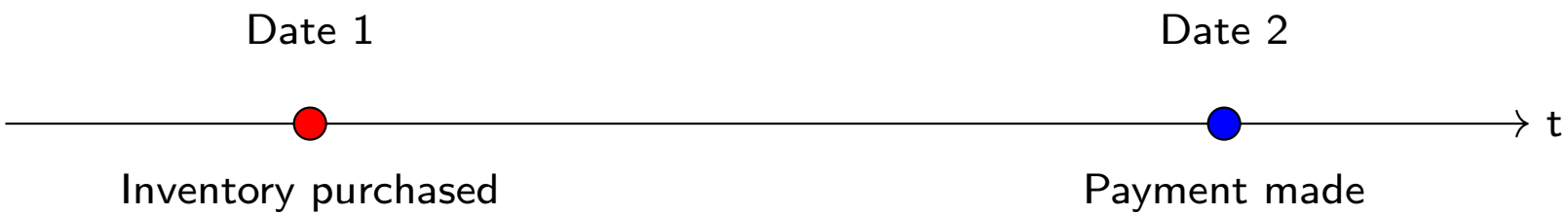
Deferred Revenue (-L)	400,000	
Sales Revenue (+R, +SE)		400,000

Accounts payable

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:

2. Jan 15:

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:

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:

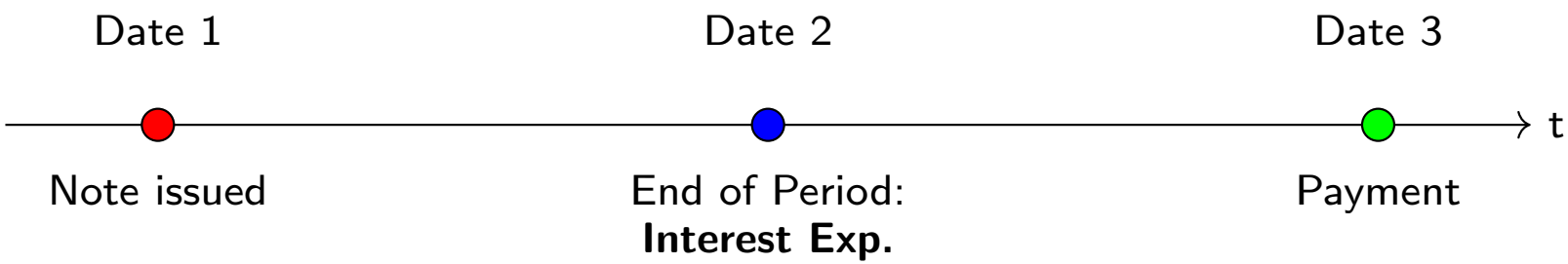
Accounts Payable (-L)	10,000	
Cash (-A)		10,000

Notes payable

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.



Notes payable

Interest Expense (Expense)

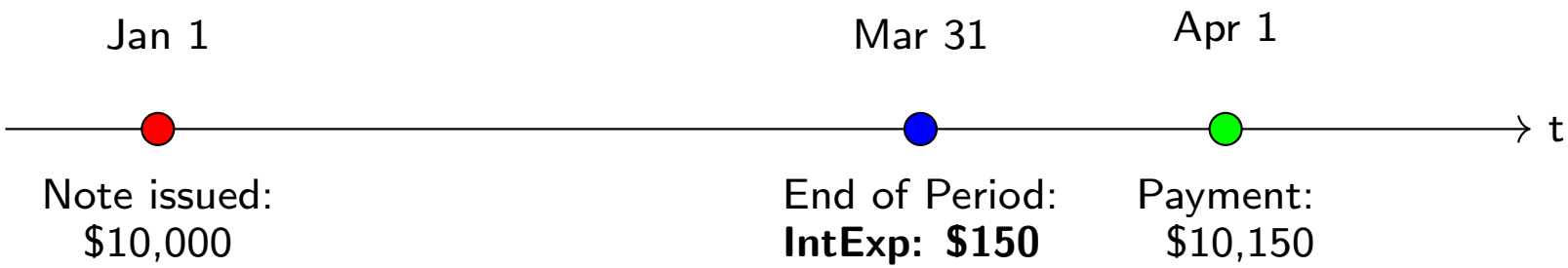
Interest incurred on loans or other borrowings during a period.

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?
2. How much interest expense would accrue monthly?
3. Interest payable on the B/S as of March 31?

Short-term notes payable - Example 1

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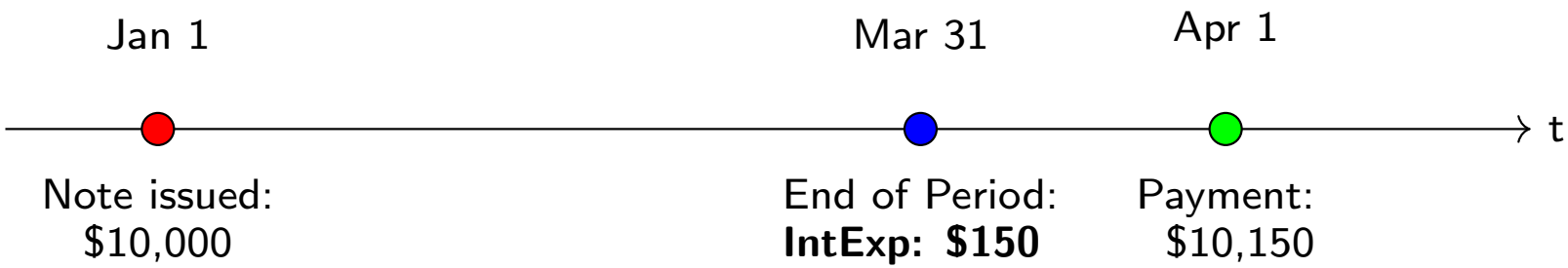

1. How much borrowed? $10000
2. How much interest expense would accrue monthly?
3. Interest payable on the B/S as of March 31?

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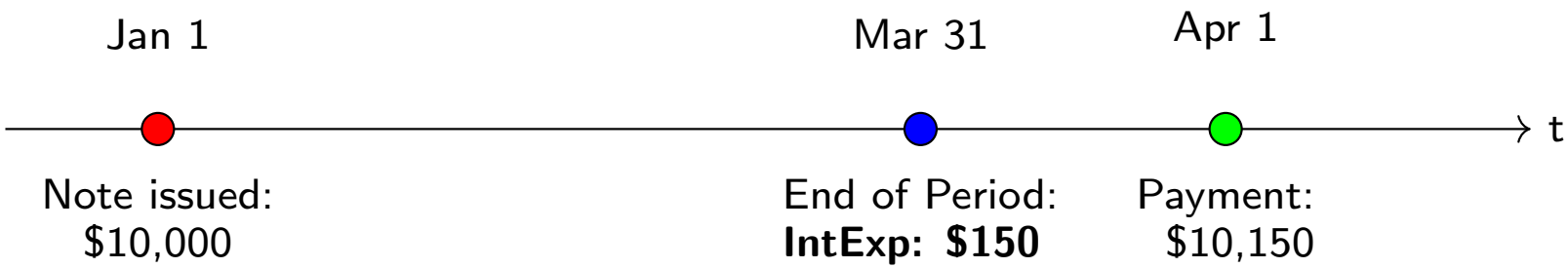
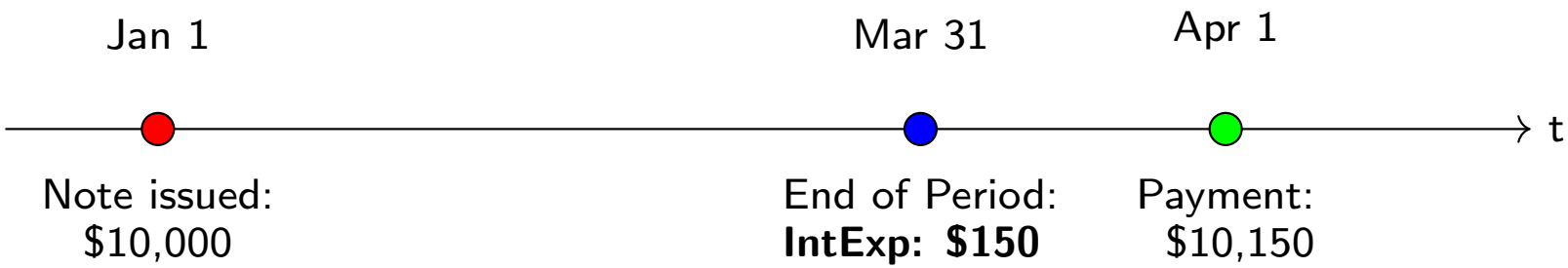
EX. A company borrows $10,000 cash from a bank on Jan 1. The note has a 6% interest rate and is due in 90 days. The company will pay the principal and interest on Apr 1. This company prepares its financial statements quarterly (at the end of March, June, Sep, and Dec). Prepare necessary journal entries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

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

2. Mar 31: Adjustment - Recognition of interest expense

3. Apr 1: Interest payment

4. Apr 1: Principal payment

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

3. Apr 1: Interest payment

4. Apr 1: Principal payment

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

4. Apr 1: Principal payment

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

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?

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

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

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

Short-term notes payable - Example 2

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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?

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

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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?

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

Short-term notes payable - Example 2

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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?

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%)

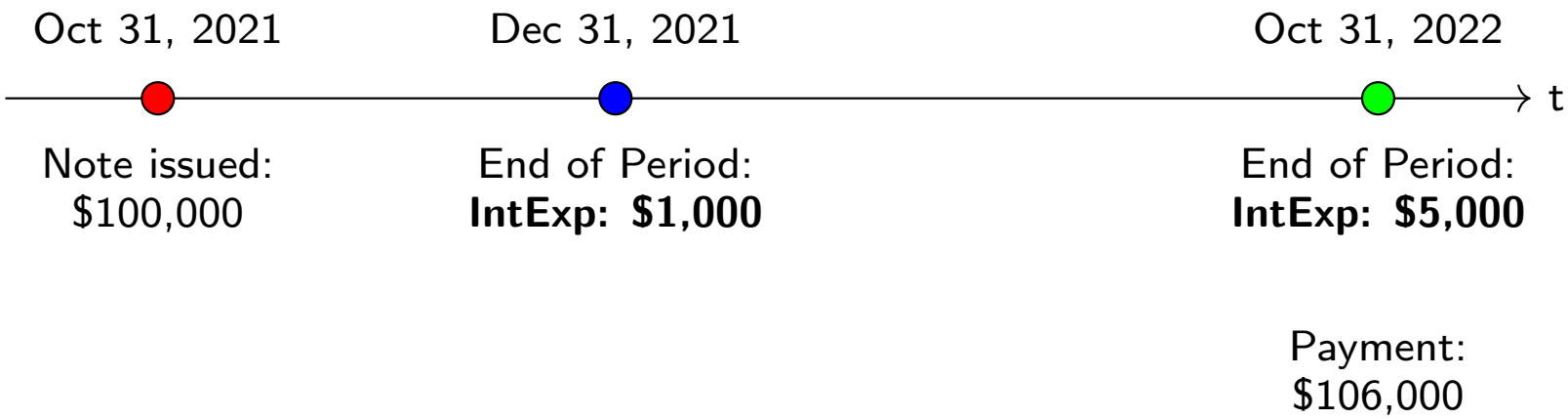
3. How much cash will General Mills pay on Oct 31, 2022 in total?

   $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

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

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

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

4. Oct 31, 2022: Interest payment

5. Oct 31, 2022: Principal payment

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

5. Oct 31, 2022: Principal payment

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

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

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.

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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

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Ratio analyses: Debt-to-asset ratio

Debt-to-Asset Ratio

the proportion of a company's assets that are financed by debt.
Calculated as: $\frac{\text{Total Liabilities}}{\text{Total Assets}}$

Ratio analyses: Debt-to-asset ratio

Debt-to-Asset Ratio

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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:

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

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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

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Answers:

1. Company A's Debt-to-Asset Ratio:

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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:

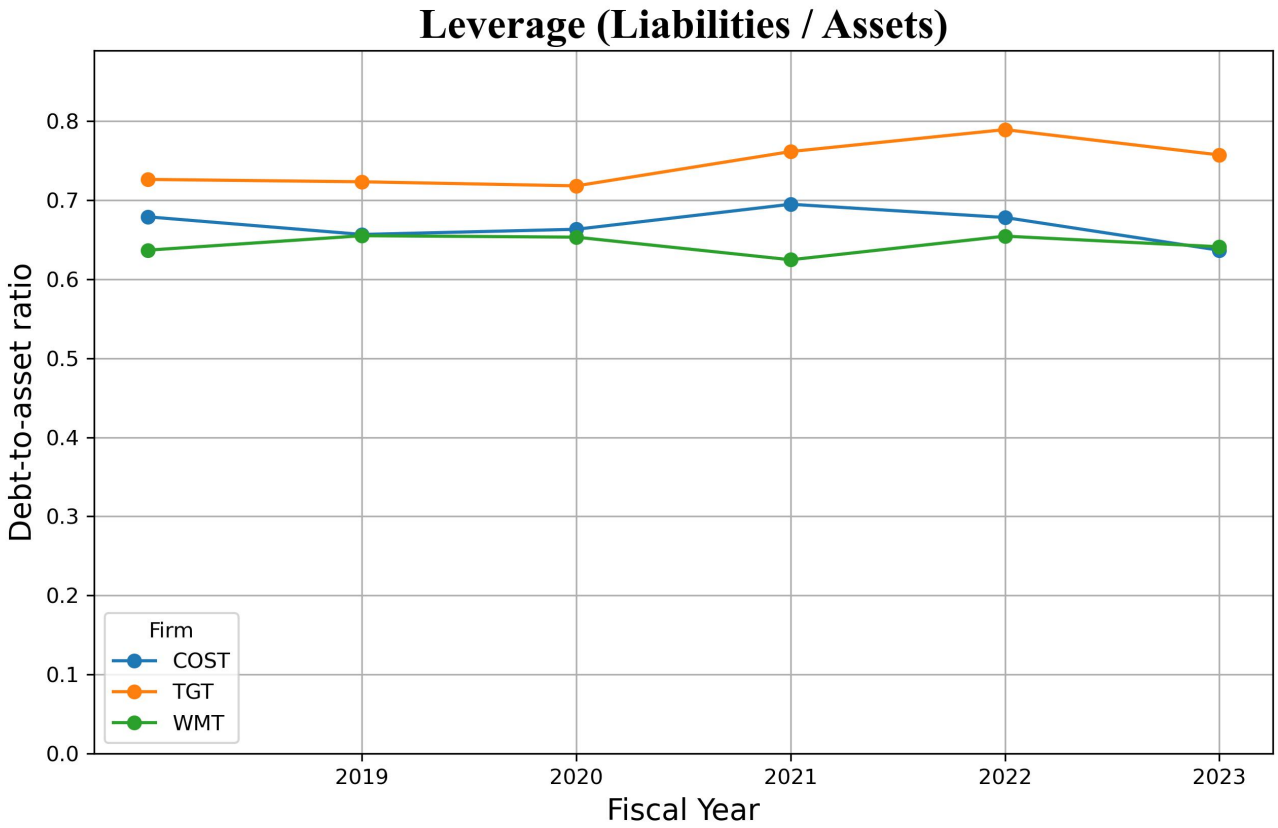
EX. Compare the debt-to-asset ratios of two companies:

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

Answers:

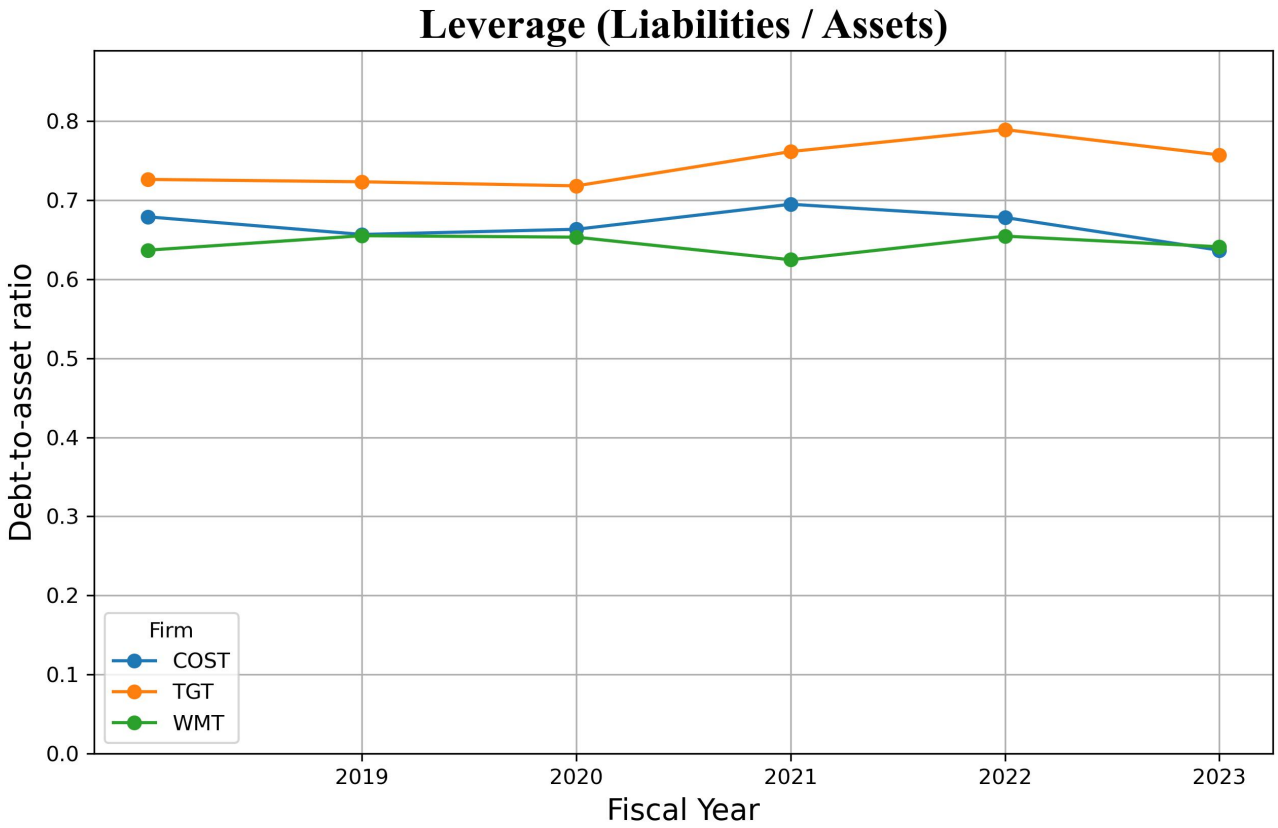
1. Company A's Debt-to-Asset Ratio: $\frac{\$400,000}{\$1,000,000} = 0.4$ or 40%
2. Company B's Debt-to-Asset Ratio: $\frac{\$600,000}{\$800,000} = 0.75$ or 75%
3. Interpretation: Company B has a higher debt-to-asset ratio, indicating higher financial leverage and potentially higher risk.

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



Inferences from the graph:

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.