

LM08 • FINANCIAL STATEMENT ANALYSIS • CFA LEVEL I

Topics in Long-Term Liabilities and Equity

Bonds, leases, pensions, deferred tax, and shareholders' equity — how companies finance long-lived operations and how that shows up in the three statements.

What This Reading Covers

This module extends the balance-sheet work done in earlier readings to the **non-current liability** and **equity** side of the firm. You will learn how to (1) measure and amortize **bonds payable**, (2) recognize **leases** on the balance sheet under ASC 842 / IFRS 16, (3) distinguish **defined-benefit vs defined-contribution** pensions, (4) reason about **deferred tax assets and liabilities**, and (5) read a **statement of changes in equity** and the solvency ratios it feeds.

Learning Outcome Statements

- LOS a** Determine the initial recognition, initial measurement, and subsequent measurement of bonds
- LOS b** Describe the effective interest method and calculate interest expense, amortisation of bond discounts/premiums, and interest payments
- LOS c** Explain the derecognition of debt
- LOS d** Describe the financial reporting of leases from a lessee's and lessor's perspective
- LOS e** Describe the financial reporting of defined-contribution, defined-benefit, and stock-based compensation plans
- LOS f** Explain how deferred tax liabilities and assets arise and how they are reported
- LOS g** Describe components of shareholders' equity and read the statement of changes in equity
- LOS h** Calculate and interpret leverage and coverage ratios

Exam Tip: Bond amortization (effective interest method) and lease classification/reporting are the most heavily tested quantitative topics in LM08. Memorize the formula *Interest expense = Beginning carrying amount × market rate at issuance* — it appears in nearly every FSA mock set.

LOS A · INITIAL RECOGNITION & MEASUREMENT OF BONDS

Issuing a Bond: Par, Premium, or Discount

Initial measurement rule: The bond payable is recorded at the **present value of future cash flows discounted at the market rate at issuance**. That market rate is called the *effective interest rate* (or borrowing rate) and it is the basis for subsequent interest expense.

Three Scenarios (same bond, different market rates)

COUPON VS. MARKET	ISSUED AT	PROCEEDS VS. FACE
Coupon = Market rate	Par	Proceeds = Face value
Coupon > Market rate	Premium	Proceeds > Face value
Coupon < Market rate	Discount	Proceeds < Face value

SOURCE EXAMPLE — \$1M FACE, 5% COUPON, 5-YR BOND

MARKET = 4%
 Issued at PREMIUM
Proceeds = \$1,044,518
 $N=5 \cdot PMT=50,000$
 $FV=1,000,000 \cdot I/Y=4$
 BS/ Cash ↑1,044,518
 Bonds Payable ↑1,044,518

MARKET = 5%
 Issued at PAR
Proceeds = \$1,000,000
 $N=5 \cdot PMT=50,000$
 $FV=1,000,000 \cdot I/Y=5$
 BS/ Cash ↑1,000,000
 Bonds Payable ↑1,000,000

MARKET = 6%
 Issued at DISCOUNT
Proceeds = \$957,876
 $N=5 \cdot PMT=50,000$
 $FV=1,000,000 \cdot I/Y=6$
 BS/ Cash ↑957,876
 Bonds Payable ↑957,876

Statement Effects at Issuance

Cash Flow Statement CFF → **Inflow** = proceeds from issuance (premium, par, or discount proceeds)

Balance Sheet **Cash** ↑ by proceeds · **Bonds Payable** ↑ by proceeds (this is the carrying amount)

Income Statement No effect at issuance (effect begins at first coupon date)

Issuance Costs

Under **both IFRS and US GAAP**, bond issuance costs (legal fees, underwriter spreads) are **included in the measurement of the liability** — i.e., Bonds Payable reflects *net proceeds* (gross proceeds less issuing fees). They are *not* expensed immediately.

Exam Tip: Historically, US GAAP expensed issuance costs upfront while IFRS reduced the bond carrying amount. The rules have converged — today both standards reduce the carrying amount. Be careful: older questions may reference the historical GAAP treatment.

LOS B · EFFECTIVE INTEREST METHOD & AMORTIZATION

The Effective Interest Method

Core formula: Interest expense in period t = **Beginning carrying amount** × **market rate in effect at issuance**. The coupon payment is the cash interest paid. The difference between the two is the **amortization** of the discount or premium.

$$|\text{Interest expense} - \text{Coupon payment}| = \text{Amortization amount}$$

Which Method Is Allowed?

EFFECTIVE INTEREST METHOD

Required under IFRS · **Preferred** under US GAAP

Interest expense = carrying amount × yield at issuance (not coupon rate).

STRAIGHT-LINE METHOD

Permitted under **US GAAP only**, if not materially different.

Amortizes the total discount/premium *evenly* over the life of the bond.

How the Carrying Amount Moves

DISCOUNT BOND (COUPON < MARKET)

Bonds Payable **increases** each period toward face value. Because **Interest expense** > **Coupon payment**, the excess accretes onto the liability each period.

Int Exp > Coupon

BV rises → par

PREMIUM BOND (COUPON > MARKET)

Bonds Payable **decreases** each period toward face value. Because **Interest expense** < **Coupon payment**, the excess coupon pays down the premium each period.

Int Exp < Coupon

BV falls → par

Income Statement: How Interest Expense Is Built

ISSUED AT	INTEREST EXPENSE =
Par	Coupon PMT
Discount	Coupon PMT + amortization of discount
Premium	Coupon PMT – amortization of premium

Alternative: Fair Value Option. Companies may elect (IFRS: *financial liabilities at fair value through profit or loss*; GAAP: *fair value option*) to report bonds at current fair value each period. When rates **rise**, the liability falls → **gain**. When rates **fall**, the liability rises → **loss**. FV changes from interest rates go to the **IS**; FV changes from credit quality go to **OCI**.

Exam Tip: A company that reports bonds at amortized cost **understates** leverage when rates have dropped (market value of debt is higher than book value) and **overstates** leverage when rates have risen. IFRS and GAAP require fair-value disclosures even when the fair-value option is not elected.

LOS B · WORKED EXAMPLE — DISCOUNT BOND

Amortization Schedule — \$1M Face, 5% Coupon, Market 6%

WORKED EXAMPLE (SOURCE)

5-Year Discount Bond, Effective Interest Method

GIVEN

\$1,000,000 face · 5% annual coupon · 5-year · market rate at issuance = 6%

Proceeds (from calculator): $N=5$, $PMT=50,000$, $FV=1,000,000$, $I/Y=6 \rightarrow PV = \$957,876$

FIND

Interest expense, amortization, and ending carrying amount for the first three periods.

SOLUTION

→ SOLUTION (EFFECTIVE INTEREST METHOD)

Interest expense = Beginning carrying amount $\times$ 6% · Amortization = Int expense – Coupon (\$50,000) ·

Ending BV = Beginning BV + Amortization

PERIOD	BEGIN BV	INT EXP (6%)	COUPON	AMORT.	END BV
1	\$957,876	\$57,473	\$50,000	\$7,473	\$965,349
2	\$965,349	\$57,921	\$50,000	\$7,921	\$973,270
3	\$973,270	\$58,396	\$50,000	\$8,396	\$981,666

Each period, Interest expense > Coupon, so the liability grows toward 1,000,000. At maturity, carrying amount = face = 1,000,000.

✓ ANSWER

Period 1 interest expense \$57,473

Period 1 discount amortization \$7,473

End-Period-3 carrying amount**\$981,666****◆ TAKEAWAY**

Interest expense *grows* each period as the carrying amount accretes toward par. Total interest expense across all 5 years = $(5 \times 50,000) + (1,000,000 - 957,876) = 250,000 + 42,124 = 292,124$ cash coupons + amortized discount.

LOS B · WORKED EXAMPLE — PREMIUM BOND

Amortization Schedule — \$1M Face, 5% Coupon, Market 4%

WORKED EXAMPLE (SOURCE)

5-Year Premium Bond, Effective Interest Method

GIVEN

\$1,000,000 face · 5% annual coupon · 5-year · market rate at issuance = 4%

Proceeds (from calculator): $N=5$, $PMT=50,000$, $FV=1,000,000$, $I/Y=4 \rightarrow PV = \$1,044,518$

FIND

Interest expense, amortization, and ending carrying amount for the first three periods.

SOLUTION

→ SOLUTION (EFFECTIVE INTEREST METHOD)

Interest expense = Beginning carrying amount $\times$ 4% · Amortization = Coupon – Int expense · Ending BV = Beginning BV – Amortization

PERIOD	BEGIN BV	INT EXP (4%)	COUPON	AMORT.	END BV
1	\$1,044,518	\$41,781	\$50,000	\$8,219	\$1,036,299
2	\$1,036,299	\$41,452	\$50,000	\$8,548	\$1,027,751
3	\$1,027,751	\$41,110	\$50,000	\$8,890	\$1,018,861

Each period, Coupon > Interest expense, so the premium is paid down. Bonds Payable declines toward \$1,000,000. At maturity, carrying amount = face.

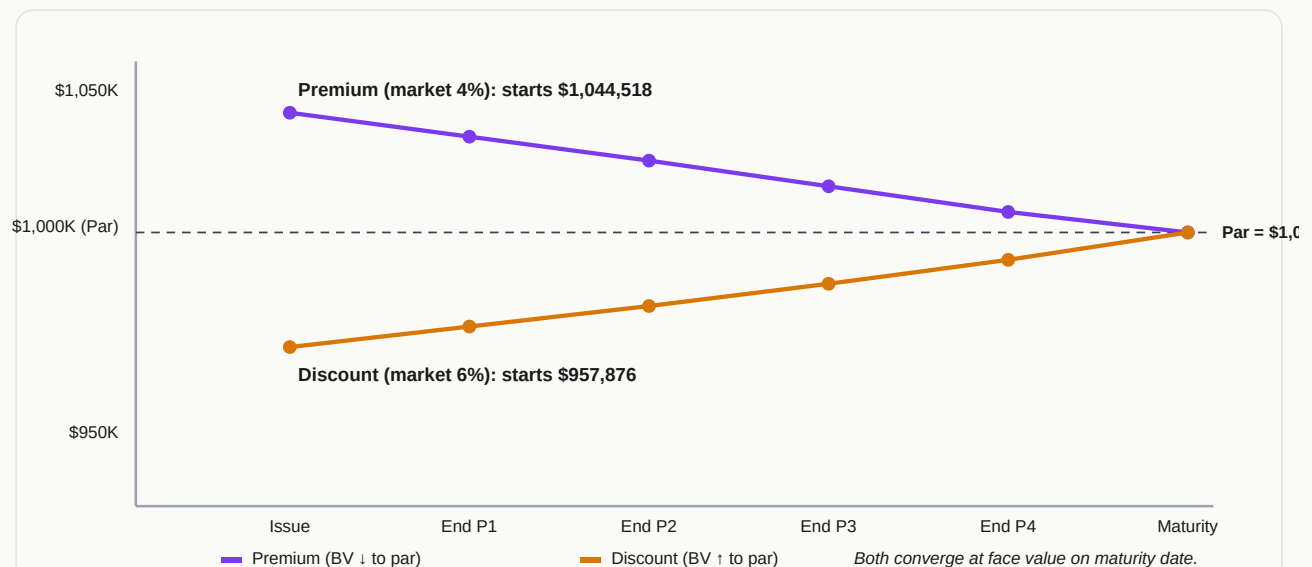
✓ ANSWER

Period 1 interest expense \$41,781

Period 1 premium amortization \$8,219

End-Period-3 carrying amount**\$1,018,861****◆ TAKEAWAY**

Interest expense *shrinks* each period as the premium is written off. The premium of \$44,518 is amortized against coupon payments, reducing reported interest expense relative to the cash coupon. Total IS interest $\neq$ total cash coupons.

VISUAL · CARRYING AMOUNT OVER TIME**How the Liability Moves to Par****CARRYING AMOUNT OF BONDS PAYABLE — 5-YEAR \$1M FACE, 5% COUPON****Key visual takeaways**

- Both curves **converge on face value** at maturity — this is guaranteed by amortization.
- The premium curve (purple) and discount curve (amber) are mirror images through the par line.
- Interest expense *declines* over time for a premium bond and *rises* for a discount bond — because each year's expense is *carrying amount* $\times$ *constant market rate*.

LOS B & C • CASH FLOW CLASSIFICATION AND DERECOGNITION OF DEBT

Where Interest and Principal Land on the CFS

Cash Flow Classification (Bond Life)

	IFRS	US GAAP
Issuance proceeds	CFF inflow	CFF inflow
Coupon payments (cash interest)	CFO or CFF outflow (policy choice)	CFO outflow
Discount/premium amortization	Non-cash item — add back to NI in CFO (indirect method)	
Principal repayment at maturity	CFF outflow	CFF outflow

Exam Tip: Amortization of a bond discount or premium is a **non-cash adjustment**. Only the cash coupon affects cash flow. Under the indirect method, interest expense (which differs from the cash coupon for discount/premium bonds) is already inside NI, so the amortization must be added back (discount) or deducted (premium) to reconcile to cash.

Derecognition of Debt

AT MATURITY

- Bonds Payable reduced to **zero**
- Cash reduced by face value
- **CFF outflow** = face value
- No gain or loss (carrying amount = face)

BEFORE MATURITY (CALLED OR REPURCHASED)

- Bonds Payable reduced to zero
- **Gain/(Loss) = Carrying amount – Cash paid** → reported on IS
- CFO: gain is *deducted* from NI; loss is *added back* to NI (non-cash)
- CFF: **cash payment** is the outflow

Gain/loss intuition. If market rates have *risen* since issuance, the bond's market price (what the company pays to repurchase) is below carrying amount → **gain**. If rates have *fallen*, the market price is above carrying amount → **loss**. Companies retiring debt early typically do so because rates have fallen (and they can refinance cheaper) — often producing a loss.

Example: Early Retirement

Carrying amount of bond = 957,000. *Company repurchases for 970,000 cash.*

Gain/(Loss) = 957,000 − 970,000 = \$(13,000) loss → reported on IS.

CFF: 970,000 cash out flow. CFO (indirect method) : add 13,000 loss back to NI.

LOS • DEBT COVENANTS

Affirmative vs. Negative (Restrictive) Covenants

Covenants are legal promises written into the bond **indenture**. They protect bondholders by constraining issuer behavior. Breach is a serious event — can trigger cross-default, force immediate repayment, and cascade through the capital structure.

AFFIRMATIVE COVENANTS

Things the issuer **must do**. "Promises to keep."

- **Cross-default clause** — default on any other debt = default on this bond
- **Pari passu clause** — this bond ranks equally with other senior debt
- Maintain insurance, pay taxes, file audited financials on time

NEGATIVE / RESTRICTIVE COVENANTS

Things the issuer **must not do**. Limits on issuer action.

- **Negative pledge clause** — cannot issue debt senior to this one
- Limit dividends or share buybacks
- Maintain minimum interest coverage / maximum leverage
- Restrict asset sales or additional borrowing

Investment-Grade vs. High-Yield Covenants

Investment-grade issuers typically face **few** restrictive covenants. High-yield (non-investment-grade) issuers face **many more** restrictive covenants and often must pledge collateral. Revolving lines of credit and loans also commonly include restrictive covenants.

Exam Tip: A covenant breach is a classic motivation for **aggressive accounting choices**. Because violating a debt covenant can accelerate repayment, highly leveraged firms under stress may manage reporting to stay within leverage/coverage thresholds — a major financial-reporting-quality warning sign.

QUIZ 1 • CHECKPOINT

Test Your Understanding: Bonds & Derecognition

Q1. A 5-year bond with a 5% annual coupon and \$1,000,000 face value is issued when the market rate is 6%. At issuance, the amount recorded as Bonds Payable is *closest to*:

Q2. Under the effective interest method, the first-period interest expense on a discount bond with a beginning carrying amount of \$957,876 and a market rate at issuance of 6% is *closest to*:

Q3. A company repurchases bonds with a carrying amount of *9.5million* for 9.8 million cash. On the income statement, the company will report:

Q4. Under US GAAP, cash coupon payments on a bond are *most likely* classified as:

Q5. A negative pledge clause is *most accurately* described as:

LOS D · LESSEE ACCOUNTING — ASC 842 / IFRS 16

Leases from the Lessee's Side

The big change under IFRS 16 and ASC 842: Both operating *and* finance leases now appear on the lessee's balance sheet. The lessee recognizes a **right-of-use (ROU) asset** and a **lease liability**, both initially equal to the **present value of future lease payments**. Off-balance-sheet operating leases are gone.

Lease Definition — Three Requirements

A contract must meet **all three** to qualify as a lease:

- 1 It refers to a **specific asset**.
- 2 It gives the lessee **all the asset's economic benefits** during the lease term.
- 3 It gives the lessee the right to **determine how to use** the asset during the lease term.

Lease Classification — Finance vs. Operating

Finance lease = both the *benefits* and the *risks* of ownership are substantially transferred to the lessee.

Operating lease = either the benefits or the risks are *not* substantially transferred. Any given lease will be classified the same way by lessee and lessor.

US GAAP Classification Criteria (5 Tests)

If **any one** of the following is met, the lease is classified as a **finance lease**:

- 1 Ownership **transfers** to the lessee at the end of the term.
- 2 Lessee has a **purchase option** reasonably certain to be exercised (bargain purchase).
- 3 Lease term $\geq 75\%$ of the asset's remaining economic useful life.
- 4 PV of lease payments $\geq 90\%$ of the asset's fair value.
- 5 The asset is **specialized** — no alternative use to the lessor at the end of the lease.

Exam Tip: Under IFRS 16 there is **no such test for lessees** — every lease (except short-term <12 months or low-value $\leq \$5,000$) is treated like a finance lease. US GAAP still runs the 5 tests to decide lessee *income-statement*

treatment (which differs materially for operating leases).

Short-Term / Low-Value Exception

- **IFRS:** <12 months *or* low value (up to ~\$5,000)
 - **US GAAP:** <12 months only
 - Treatment: **no lease asset or liability** on BS; payment = rental expense on IS (like old operating leases)
-

LOS D • REPORTING MECHANICS — FINANCE VS. OPERATING

Finance Lease vs. Operating Lease — Side-by-Side

	FINANCE LEASE (IFRS & GAAP)	OPERATING LEASE (GAAP ONLY)
BS at inception	ROU asset & lease liability = PV of payments	ROU asset & lease liability = PV of payments
Liability amortization	Effective interest method	Effective interest method
Asset amortization	Straight-line over lease term	Lease payment minus interest (so asset depreciation <i>equals</i> liability amortization each period)
IS presentation	Two expenses: interest + depreciation	One single operating expense (straight-line)
Expense pattern	Front-loaded (interest highest early)	Straight-line (level expense)
CFS: Principal portion	CFF outflow	Entire payment → CFO outflow
CFS: Interest portion	CFO (GAAP) or CFO/CFF (IFRS)	(included in total CFO above)
Asset = Liability?	No — ROU amort $\neq$ principal amort early in lease	Yes — both amortize at the same pace

Why the Front-Loading Happens for Finance Leases

The ROU asset is depreciated **straight-line** (equal amount each year). The lease liability is amortized using the **effective interest method** (interest = liability $\times$ rate, declining as liability falls). Early in the lease, interest is high; later, interest is low. Total expense = depreciation + interest is therefore **higher early, lower later**.

Under a GAAP operating lease, ROU amortization is *set equal* to lease payment minus interest — ensuring one level straight-line lease expense each period.

Why the Asset $\neq$ Liability Under Finance Lease

In early years, ROU amortization (straight-line) **exceeds** the principal portion of the payment (which is the small part of the payment not consumed by high interest). So ROU falls faster than the liability. They start equal, diverge during the lease, and both reach **zero** at lease end.

Exam Tip: If asked about ratio effects: a finance lease makes **early-year EBIT lower** (higher depreciation + front-loaded interest), **CFO higher** (only interest is CFO; principal is CFF), and **total debt higher** relative to a similar operating lease under GAAP. IFRS — where all leases are finance leases for lessees — would show those effects universally.

LOS D · LESSOR ACCOUNTING

Leases from the Lessor's Side

For lessors, the financial reporting of both finance and operating leases is the same under IFRS and US GAAP (unlike for lessees, where US GAAP still has two separate lessee models).

FINANCE LEASE (LESSOR)

- **Remove** the leased asset from the balance sheet.
- **Add** a lease receivable = PV of future lease payments.
- Recognize gain/loss if PV of payments $\neq$ book value of asset.
- Amortize receivable using **effective interest method**.
- Recognize **interest portion** of payments as interest income (often revenue).
- Entire cash receipt → **CFO inflow**.

OPERATING LEASE (LESSOR)

- **Keep** the leased asset on the balance sheet.
- Continue **depreciation** expense on the asset.
- Recognize entire lease payment as income (straight-line).
- Depreciation + other costs → IS expenses.
- Entire cash receipt → **CFO inflow**.

Finance Lease Sub-Types (Lessor)

Sales-type lease Sales proceeds = revenue · Carrying value of asset = COGS · Gain/loss recognized at inception.

Direct financing lease Gain/loss is **deferred** and recognized over the life of the lease as additional interest income/expense.

Why lease? Advantages for lessees: smaller initial cash outflow · cheaper financing (implicit rate can be below a loan rate) · less risk of obsolescence (lessee returns the asset at end of term, not bearing terminal-value risk).

LOS E • DEFINED CONTRIBUTION VS. DEFINED BENEFIT PLANS

Pension and Stock-Based Compensation Basics

DEFINED CONTRIBUTION (DC)

Employer contributes a specified sum each period. Future benefit is *not* defined — depends on investment returns.

- Employee bears investment risk
- Pension expense = employer contribution
- **No future liability** on BS
- Simple accounting (cash in = expense)

DEFINED BENEFIT (DB)

Employer promises a specific payment stream at retirement (e.g., 2% of final salary × years of service).

- Employer bears investment risk
- Must estimate the future obligation (PBO)
- **Funded status** = Plan assets – PBO → net asset or liability on BS
- Complex — actuarial assumptions (turnover, mortality, discount rate, salary growth)

Funded Status

$$FundedStatus = FVofPlanAssets - PensionBenefitObligation(PBO)$$

Overfunded (assets > obligation) → net pension *asset*. **Underfunded** (obligation > assets) → net pension *liability* (reported as a non-current liability).

Change in Funded Status — Where Each Component Goes

COMPONENT	IFRS	US GAAP
Current service cost	IS	IS
Net interest expense/income	IS	IS (interest on obligation)
Expected return on plan assets	(netted into interest above)	IS
Past service costs	(in service cost — IS)	OCI
Actuarial gains/losses & remeasurements	OCI	OCI (or immediate P&L allowed)

Stock-Based Compensation

- Treated as an **expense** even though no cash changes hands at grant.

- Both IFRS and US GAAP require **fair value** measurement at grant date.
- Expensed over the **vesting period** (service period from grant to when employee owns/exercises).
- Disclosure required: nature of plan, method of fair value determination, impact on earnings.
- Dilutes existing shareholders; reduces EPS (add to diluted share count via treasury stock method).

Exam Tip: Remember the split: **DC** is easy — expense = cash contribution, no BS liability. **DB** is hard — you get a BS funded status plus IS/OCI components. IFRS puts actuarial gains/losses in OCI; US GAAP also allows past service costs to go to OCI.

LOS F & G · INCOME TAXES & SHAREHOLDERS' EQUITY

Deferred Taxes and Equity Components

Why Deferred Taxes Arise

Tax laws are not the same as financial-reporting rules. Temporary (timing) differences between the **book carrying amount** of an asset/liability and its **tax base** create either a **DTL** or a **DTA**. Permanent differences (e.g., tax-exempt interest) do *not* create DT items.

$$DTL \text{ or } DTA = (\text{Taxbase} - \text{Carryingvalue}) \times \text{Statutorytaxrate}$$

DEFERRED TAX LIABILITY (DTL)

Company recognizes **an expense for tax** **sooner** than for books → pays less tax now, *more* later. Classic example: **accelerated depreciation** for tax, straight-line for books.

Increase in DTL → increases income tax expense.

DEFERRED TAX ASSET (DTA)

Company recognizes **an expense for books** **sooner** than for tax → pays more tax now, *less* later. Example: warranty provisions, tax loss carryforwards.

Increase in DTA → decreases income tax expense. DTA only has value if probable future taxable income.

Reconciling Tax Expense and Taxes Payable

$$\text{Income tax expense} = \text{Taxes payable} + \Delta DTL - \Delta DTA$$

DTA recognition test

Under **IFRS**, DTAs are recognized only to the extent that it is **probable** future taxable profits will be available to utilize them. Under **US GAAP**, DTAs are recognized in full, then reduced by a **valuation allowance** if realization is not more-likely-than-not.

Analyst Adjustments

If reversal is expected	Treat DTL as a liability (real future tax payment)
If non-reversal is expected	Treat DTL as equity (growing company keeps replacing depreciable assets)
If reversal is uncertain	Ignore (exclude from both liability and equity for ratio purposes)

Shareholders' Equity — Components

- **Contributed capital** = Common stock at par + Additional paid-in capital (APIC)
- **Retained earnings** = Accumulated net income – cumulative dividends paid
- **Treasury stock** — shares repurchased, reported as a **contra-equity** account (reduces total equity)
- **Accumulated Other Comprehensive Income (AOCI)** — cumulative OCI items: unrealized gains/losses on FV-through-OCI securities, foreign currency translation, pension remeasurements, hedge effectiveness
- **Minority (non-controlling) interest** — equity attributable to third parties in consolidated subsidiaries

Statement of Changes in Equity

Reports the **reconciliation from beginning to ending balance of each equity component** for the period.
Typical flow: Beginning Equity + Net Income + OCI + New Share Issuance – Treasury Stock Purchases – Dividends = Ending Equity.

LOS H • LEVERAGE AND COVERAGE RATIOS

Solvency Ratios Built From LM08

Non-current liabilities and equity feed the **solvency** ratios that creditors, credit analysts, and covenant calculators rely on. Since ASC 842 / IFRS 16 pulled lease liabilities onto the balance sheet, these ratios now capture lease-financed firms more faithfully.

Debt (Leverage) Ratios

RATIO	FORMULA	WHAT IT MEASURES
Debt-to-Assets	Total Debt / Total Assets	Proportion of assets financed by creditors
Debt-to-Equity	Total Debt / Stockholders' Equity	Debt relative to shareholder cushion
Debt-to-Capital	Total Debt / (Total Debt + Stockholders' Equity)	Proportion of total capital from creditors
Financial Leverage Multiplier	Avg. Total Assets / Avg. Total Equity	DuPont leverage factor

Coverage Ratios

RATIO	FORMULA	NOTES
Interest Coverage	EBIT / Interest Expense	Classic covenant metric — how many times EBIT covers interest
Fixed Charge Coverage	(EBIT + Lease Payments) / (Interest Expense + Lease Payments)	Adds lease payments to numerator & denominator — captures lease-financed firms
EBIT Interest Coverage	EBIT / Gross Interest	Uses gross interest incl. capitalized interest
EBITDA / Gross Interest	EBITDA / Gross Interest	Adds back D&A to emphasize cash coverage
Total Debt / EBITDA	Total Debt / EBITDA	Common covenant; lower is better

What Counts as "Total Debt"?

A typical analyst build of Total Debt includes:

- Long-term liabilities (bonds payable, long-term notes)
- Interest-bearing short-term liabilities (notes payable, commercial paper)
- Current portion of long-term debt
- Capital/finance lease liabilities (now including operating lease liabilities under ASC 842 / IFRS 16)
- Redeemable preferred stock
- (Deferred tax — include only if reversal is expected)

Exam Tip: For the **fixed-charge coverage** ratio, remember to add lease payments to **both** the numerator (reverse out as an operating expense) **and** the denominator (treat as fixed charge). Capitalized lease interest now appears on the IS directly, so lease expense is already split — be careful to avoid double-counting.

QUIZ 2 · CHECKPOINT

Test Your Understanding: Leases, Pensions & Taxes

Q6. Under IFRS 16 (lessee), *which* of the following is *most accurate* for a standard (not short-term) lease?

Q7. A US-GAAP lessee holds a *finance lease*. Which cash-flow classification is *most accurate*?

Q8. In a defined contribution plan, the periodic pension expense reported by the employer is *best described* as:

Q9. A DTL is *most likely* to arise when a company:

Q10. Treasury stock on the balance sheet is *most accurately* described as:

QUIZ 3 · COMPREHENSIVE CHECKPOINT

Integrating LM08 — Schedules, Ratios & Statements

Q11. A 5-year bond with $1M$ face, 544,518. Under the **effective interest method**, how will interest expense evolve over the life of the bond?

Q12. Compared to a GAAP operating lease, a GAAP *finance lease* will *most likely* have which effect in the early years of the lease?

Q13. Company X has EBIT of $120M$, *interest expense of* $15M$, and lease payments of $\$25M$. Its fixed-charge coverage ratio is *closest to*:

Q14. Under US GAAP, which pension component is *most likely* reported in Other Comprehensive Income (OCI) rather than Net Income?

Q15. Which of the following is *least likely* to appear in the statement of changes in shareholders' equity?

MODULE COMPLETE

Your Scorecard

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LM08 Key Takeaways — Exam-Ready Cheat Sheet

Bonds Payable

- 1 **Initial measurement:** Bonds Payable = PV of future cash flows at *market rate* at issuance. Coupon > market → premium; coupon = market → par; coupon < market → discount.
- 2 **Effective interest method (IFRS required, GAAP preferred):** Interest expense = Beginning BV × market rate at issuance. Amortization = |Interest expense – Coupon|.
- 3 **Movement:** Discount → BV rises to par (Int > coupon). Premium → BV falls to par (Int < coupon).
- 4 **Cash flows:** Proceeds/principal → CFF. Interest paid: CFO (GAAP) or CFO/CFF (IFRS). Amortization is non-cash.
- 5 **Derecognition:** Gain/loss = Carrying amount – Cash paid. Cash payment → CFF outflow.

Leases

- 6 **ASC 842 / IFRS 16:** Both operating and finance leases → ROU asset + lease liability on the BS (PV of payments).
- 7 **Finance lease (both standards):** Two expenses (interest + straight-line depreciation) → front-loaded. Principal → CFF, interest → CFO.
- 8 **Operating lease (GAAP only):** Single straight-line lease expense. Entire payment → CFO. (IFRS has no such category for lessees.)

- 9 **GAAP 5 classification tests:** ownership transfer · bargain purchase option · term $\geq$ 75% useful life · PV payments $\geq$ 90% FV · specialized asset. Any one $\rightarrow$ finance lease.

Pensions, Taxes & Equity

- 10 **DC plan:** Pension expense = employer contribution. No BS liability.
- 11 **DB plan:** Funded status = Plan assets – PBO. Net pension asset/liability on BS. IS and OCI components.
- 12 **DTL** arises when expenses deducted sooner for tax than books. **DTA** arises when expenses deducted sooner for books than tax. DTA requires probable future taxable income.
- 13 **Equity:** Common stock + APIC + Retained earnings – Treasury stock (contra) + AOCI + Minority interest.

Ratios

- 14 **Leverage:** $D/A \cdot D/E \cdot D/\text{Capital}$ · Financial leverage multiplier (Avg TA / Avg TE).
- 15 **Coverage:** Interest coverage = $\text{EBIT} / \text{Interest}$. Fixed-charge coverage = $(\text{EBIT} + \text{Lease Pmts}) / (\text{Interest} + \text{Lease Pmts})$.

Last-Minute Exam Checklist

Bond Int exp = Begin BV $\times$ market rate at issuance (never $\times$ coupon rate)

Discount: BV $\uparrow$ to par · Int $>$ Coupon · Amort added to IS interest

Premium: BV $\downarrow$ to par · Int $<$ Coupon · Amort subtracted from IS interest

Issuance: CFF inflow = net proceeds (after fees, IFRS & GAAP)

Early retirement gain/(loss): Carrying amount – Cash paid

IFRS 16/ASC 842: All lessee leases $\rightarrow$ ROU + liability on BS

Finance lease: Int (CFO) + Principal (CFF) · Two expenses · Front-loaded

GAAP operating lease: Single expense · Entire payment CFO

DB pension: PBO – Assets = Funded status (on BS)

DTL $\times$ DTA equation: Tax Expense = Taxes Payable + Δ DTL – Δ DTA

Treasury stock: contra-equity (reduces total equity)

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