MGT 816 · The Private Firm CFO

S00 · CFO Toolkit Bootcamp

(Monday-makeup class)

Fri September 4, 2026 — Monday schedule · Yale SOM

Taught by the MGT 816 teaching team

Where we stopped, and what today covers

From Wednesday

• All three sections stopped at the same slide — the CFO's operating year.

• Nobody is behind relative to anybody else.

• First twenty minutes: burn, runway, and the levers that extend it.

Then the bootcamp

• Journal entries and the accounting equation

• The four financial statements

• The Excel conventions this course grades against

• PS1 and Case 1 groups formed before you leave

Nothing today is graded and nothing is collected. Everything posts to Canvas tonight.

Burn rate & runway ★

- Burn rate = net cash your company uses per period (usually monthly).
- Runway = how long until the cash runs out.
- Watch net, not gross — only net cash out drains the tank.
- Runway tells you when to raise or cut.

Gross burn = total cash out / mo

Net burn = cash out − cash in

Runway (months) = Cash ÷ Net burn

Out-of-cash date = today + runway

Burn is a cash concept: depreciation is not burn, an unpaid invoice is not burn, and prepaying a year of rent is burn now.

Check your work: SixWings runway [Section 1]

You worked this from Wednesday's posted slides. Three minutes to compare answers with your neighbor and fill any gaps:

(a) gross burn (b) net burn (c) runway in months + the month we run out of cash (d) Option 1 or Option 2? (e) if we raise in month 6, how big a round buys 18 months of runway?

3 minutes — then we work it together. If you did not get to it, the numbers you need are below.

Section 1 (1:00 · white half-sheets): Cash $1,200K · payroll $150K/mo · rent+cloud $45K/mo · other $30K/mo · collections $75K/mo · Option 1: cut $30K/mo · Option 2: collect $150K past-due AR today.

'Today' = Sep 1, 2026 cash balance.

Check your work: SixWings runway [Section 2]

You worked this from Wednesday's posted slides. Three minutes to compare answers with your neighbor and fill any gaps:

(a) gross burn (b) net burn (c) runway in months + the month we run out of cash (d) Option 1 or Option 2? (e) if we raise in month 6, how big a round buys 18 months of runway?

3 minutes — then we work it together. If you did not get to it, the numbers you need are below.

Section 2 (2:35 · blue half-sheets): Cash $1,800K · payroll $200K/mo · rent+cloud $60K/mo · other $40K/mo · collections $100K/mo · Option 1: cut $40K/mo · Option 2: collect $200K past-due AR today.

'Today' = Sep 1, 2026 cash balance.

Check your work: SixWings runway [Section 3]

You worked this from Wednesday's posted slides. Three minutes to compare answers with your neighbor and fill any gaps:

(a) gross burn (b) net burn (c) runway in months + the month we run out of cash (d) Option 1 or Option 2? (e) if we raise in month 6, how big a round buys 18 months of runway?

3 minutes — then we work it together. If you did not get to it, the numbers you need are below.

Section 3 (4:10 · yellow half-sheets): Cash $2,100K · payroll $240K/mo · rent+cloud $70K/mo · other $40K/mo · collections $140K/mo · Option 1: cut $35K/mo · Option 2: collect $210K past-due AR today.

'Today' = Sep 1, 2026 cash balance.

Extending the runway: three levers ★

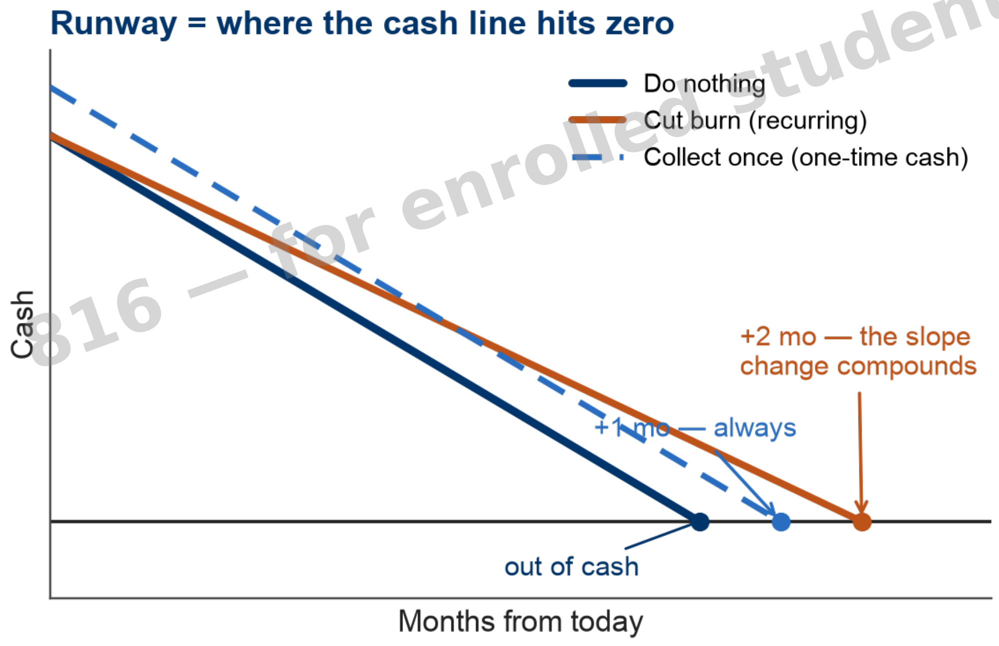
Runway = months until the line hits zero. Each lever moves that point right.

1. Raise capital — resets the cash line up, and costs you equity

2. Cut burn — recurring, so it compounds

3. Work the working capital — free, and one-time

If you have to cut people, cut once and cut deep. Serial small layoffs are death by a thousand cuts, you lose the people you wanted to keep after the second one.



"The only unforgivable sin in business is running out of cash." — Harold Geneen

Working capital is financing ★

Collect faster

- Invoice the moment you deliver, and invoice accurately
- Run a standard collections cadence; approve credit formally
- Watch big customers using Net 90 as free financing

Pay smarter

- Never pay early unless there is a discount
- Dispute wrong invoices — correct, and it buys time
- Push for Net 45/60; hold vendors to their SLAs

Amazon: cash conversion cycle −57 days — suppliers finance the business at zero interest, and the float grows with sales. Walmart: +4 days.

Collect in 15 days and pay in 45 and you are running on float, and that float funds growth. The sign is not health: negative working capital here is a strength.

What today is

Today IS

- Debits/credits + balance-sheet-equation refresher
- The four financial statements in 15 minutes
- Excel template setup for Wednesday's Cap Table Lab
- PS1 groups + Case 1 groups formed on Canvas
- Open Q&A

By today have your group formed and Wednesday's lab de-risked.

The accounting equation, expanded

Assets = Liabilities + Shareholders' Equity

— true after every transaction.

SE = Contributed capital (Common + Preferred + APIC) + Retained Earnings

Retained Earnings grows by Net Income = Revenues − Expenses (shrinks with losses and dividends)

Every transaction touches at least two accounts and leaves the equation balanced. That is all double-entry means.

Debits & credits: the cheat card

Account type	Increases with	Decreases with	Normal balance
Assets	Debit	Credit	Debit
Liabilities	Credit	Debit	Credit
Equity	Credit	Debit	Credit
Revenues	Credit	Debit	Credit
Expenses	Debit	Credit	Debit

Debit = left, credit = right. Nothing more moral than that.

Anatomy of a journal entry

SixWings buys a laptop for \$3,000, paid in cash.

Dr	Computer Equipment	3,000	
Cr	Cash		3,000

Same event in the equation: Assets +3,000 (equipment) and −3,000 (cash) = Liabilities 0 + SE 0 → equation still balances.

In the course I'll usually record straight into A = L + SE panels — like the workbook you're about to see. A journal entry and the panel are the same information in two costumes.

Workbook: three financings, three entries

Task: Open S00_BS_Equations_Workbook_Student.xlsx (Canvas → Week 1). Follow along; call out the entry before I reveal each sheet.

1. Five founders contribute **$500** total for common stock — Initial Capitalization sheet
2. Angel investors invest **$800,000** for Seed preferred stock — Angel Investors sheet
3. A VC invests **$6,000,000** for Series A preferred stock — VC Firm sheet

Question we will NOT answer today: how many shares everyone gets. That's Wednesday.

What hits the books — and what never does ★

Financing	Entry	Liabilities
Founders $500	Dr Cash 500 / Cr Common Stock 500	No impact
Angels $800,000	Dr Cash 800,000 / Cr Preferred Stock–Seed 800,000	No impact
VC $6,000,000	Dr Cash 6,000,000 / Cr Preferred Stock–Series A 6,000,000	No impact

Equity is recorded at the amount INVESTED. Pre-money and post-money valuations are negotiated market values — they NEVER appear on the balance sheet. ★

Total equity financing on the books so far: $6,800,500.

The four statements

How do you track all your resources and obligations?

How do you show how much income you've generated?

How do you keep an eye on your cash position?

Companies use a set of four financial statements:

- Balance Sheet
- Income Statement
- Cash Flow Statement
- Statement of Stockholders' Equity

Balance sheet — what do I own, what do I owe?

	Assets	Liabilities	Shareholders' Equity
Description	Resources the company owns	Obligations owed to others	Owners' claim on assets after obligations
Example accounts	Cash · Accounts Receivable · Inventory · PP&E · Intangibles	Accounts Payable · Wages Payable · Unearned Revenue · Accrued Interest · Debt	Common Stock · Preferred Stock · Retained Earnings

A snapshot at a point in time. Always: Assets = Liabilities + Shareholders' Equity.

Income statement — how much have we earned?

Line	Plain English
Revenue	The core reason you're in business
− Cost of Revenue	Cost to deliver the product/service
= Gross Profit	Profit from delivering it
− Operating Expenses (S&M, R&D, G&A)	The costs to run the business
= Operating Income / Loss	Profit from normal operations
± Interest & Other Income/Expense	Not part of normal operations
= Pre-tax Income / Loss	Profit before taxes
− Taxes	Owed to the government
= Net Income / Loss	What's left after all costs

A period, not a point: how much profit management generated over the month/quarter/year.

EBITDA — the private-market shorthand

- Adds back interest, taxes, depreciation, and amortization to net income
- PE and VC use it as a free-cash-flow proxy for valuation multiples
- Startups often quote an "EBITDA loss"
- Caution: it ignores working capital and capex — **EBITDA ≠ cash flow**

Cash flow statement — where did my cash go?

- **Operating** — cash from normal business operations
- **Investing** — buying/selling PP&E, intangibles, other companies
- **Financing** — raising or returning capital (debt, equity)

Net change in cash + Beginning cash = Ending cash

The indirect method

Start at net income → add back non-cash items → adjust for working-capital changes.

Non-cash add-backs: Depreciation · Amortization · Impairments · Stock-based compensation

Adjustment to Net Income	Δ Current Assets	Δ Current Liabilities
Add to Net Income	Decrease	Increase
Subtract from Net Income	Increase	Decrease

Statement of stockholders' equity ≠ the cap table ★

- Reconciles each equity component (Common, Preferred, Retained Earnings) over the period
- Rarely produced by early-stage firms
- Aggregates by **account type** — not by holder
- The **cap table** lists **who owns what, holder by holder**
- Two tools, both owned by the CFO role

How the four statements tie together

Income Statement → Net Income → **Retained Earnings (in Equity)**

Cash Flow Statement → Net change in cash → **Cash (in Assets)**

Financing events → raises / returns capital → **Equity/Debt (BS) + CFF (CFS)**

Center anchor: Balance Sheet — A = L + SE

Poll: the August invoice

SixWings invoiced a customer **$4,000 in August** (service fully delivered in August). The cash arrives in **September**. On SEPTEMBER's financial statements, this cash shows up as—

A) September revenue

B) Other income

C) An operating cash inflow — but no September revenue

D) Deferred revenue

JE drill: SixWings' first month [Section 1]

Task: On the half-sheet, for each of the 6 transactions: write the journal entry (or the A = L + SE line), then build the mini income statement and balance sheet and CHECK that A = L + SE.

T1 Founders contribute **$50,000** cash for common stock

T2 Buy laptops for **$6,000** cash

T3 Invoice a customer **$8,000** for September services (on account)

T4 Collect **half** of that invoice

T5 Receive **$9,000** cash prepayment for Oct–Dec services

T6 Pay September wages of **$10,000** in cash; **$2,000** more of September wages remain unpaid at month-end

Time box: 8 minutes, solo or pairs. Deliverable: the half-sheet (not collected).

[Section 1] X=50,000 · A=6,000 · B=8,000 · C=9,000 · D=10,000 · E=2,000

JE drill: SixWings' first month [Section 2]

Task: On the half-sheet, for each of the 6 transactions: write the journal entry (or the A = L + SE line), then build the mini income statement and balance sheet and CHECK that A = L + SE.

T1 Founders contribute **$60,000** cash for common stock

T2 Buy laptops for **$8,000** cash

T3 Invoice a customer **$12,000** for September services (on account)

T4 Collect **half** of that invoice

T5 Receive **$6,000** cash prepayment for Oct–Dec services

T6 Pay September wages of **$11,000** in cash; **$3,000** more of September wages remain unpaid at month-end

Time box: 8 minutes, solo or pairs. Deliverable: the half-sheet (not collected).

[Section 2] X=60,000 · A=8,000 · B=12,000 · C=6,000 · D=11,000 · E=3,000

JE drill: SixWings' first month [Section 3]

Task: On the half-sheet, for each of the 6 transactions: write the journal entry (or the A = L + SE line), then build the mini income statement and balance sheet and CHECK that A = L + SE.

T1 Founders contribute **$40,000** cash for common stock

T2 Buy laptops for **$5,000** cash

T3 Invoice a customer **$10,000** for September services (on account)

T4 Collect **half** of that invoice

T5 Receive **$12,000** cash prepayment for Oct–Dec services

T6 Pay September wages of **$9,000** in cash; **$3,000** more of September wages remain unpaid at month-end

Time box: 8 minutes, solo or pairs.   Deliverable: the half-sheet (not collected).

[Section 3] X=40,000 · A=5,000 · B=10,000 · C=12,000 · D=9,000 · E=3,000

Excel warm-up: course template conventions

Task: Build the shell for Wednesday. These are some helpful course conventions — PS1 and the S02 lab.

1. Tabs: Assumptions and Cap_Table (rounds get added Wednesday)
2. **Inputs = blue font on light-yellow fill; formulas = black; never type a constant inside a formula**
3. Cap_Table columns: A Shareholder · B Security · C Shares · D % Fully Diluted
4. D formula pattern: =C5/C10 — absolute-ref the TOTAL-row denominator
5. Total row =SUM(...); the % column must foot to exactly 100.0% (your built-in error check)
6. Format: thousands separators on shares, one decimal on %
7. View → Freeze Panes on the header row
8. Save as **CapTable_LastFirst.xlsx** and bring it Wednesday

Time box: 5-minute demo. Build the full shell tonight — the conventions sheet is your handout.

Controls and the monthly close ★

Three controls that scale

• Segregation of duties — whoever approves a payment does not release it

• Authorization thresholds — over $1,000 needs a second approver; wires need two people

• Retention — keep invoices, leases, and the check register

Close every month, not at year-end

• Reconcile the bank to Cash; watch AR aging

• Catch unbilled and deferred revenue, unrecorded expenses, overdue AP

• Otherwise decisions run on 30-day-old numbers and year-end becomes archaeology

Neither control costs money. Skully and WrkRiot both failed for want of them.

No controls, no company: two cautionary tales

SKULLY (2016)

AR motorcycle helmets · ~$2.4M crowdfunded + ~$13M VC

• Bookkeeper's lawsuit: company money on personal rent, sports cars, strip clubs, vacations
• Bankrupt within weeks — most backers never got helmets or refunds

Missing: expense policy, card controls, board sign-off on spend

WRKRIOT (2016)

"No Games. Just Jobs." · CEO Isaac Choi, four aliases

• Faked his résumé and wealth; stopped paying staff, sent FORGED wire confirmations — an intern spotted the fake
• Exposed by an employee's Medium post; federal wire-fraud guilty plea

Missing: anyone verifying the CEO — references, bank confirms, payroll

Controls are not bureaucracy — they are why anyone can trust your numbers.

Groups & housekeeping

- Case 1 (FeedBurner) has been on Canvas since Wednesday, with the announcement that night
- **PS1** (groups of 2–4): self-signup on Canvas → People → "PS1 Group"; PS1 assigned Wed 9/9, due **Wed 9/23, 1:00 pm**
- **Case 1 (FeedBurner)** (groups ≤4): Canvas → People → "Case 1 Groups"; sign up by **Wed 9/9**; memo due **1:00 pm Wed Sep 16**
- All deliverables are due at **1:00 pm** — the start of the FIRST section, whatever your section
- Do both signups **NOW** (2 minutes, phones fine); I'm projecting the pages

What we did today / see you Wednesday

1. Everything posts tonight: deck, workbook, drill + answers, template conventions ★ (self-study appendix)
2. Equity is booked at amount invested — valuations never hit the books ★
3. Collection ≠ revenue; prepayment = liability (deferred revenue) ★
4. Net income and operating cash can move in opposite directions ★
5. Runway = cash ÷ net burn; recurring burn cuts beat one-time cash ★
6. Wednesday: S02 Cap Table Lab — bring your laptop with CapTable_LastFirst.xlsx; prep Fabozzi Ch. 7 pp. 127–130 & 140–143

Office hours by appointment (Evans 3518). Questions go to your section TA or to Megan Cunningham; their emails are on Canvas and in the syllabus.

Appendix — reference only, examinable at concept level.

A real balance sheet, annotated

Illustrative company (payments start-up) — not an actual company's results.

Balance sheet ($000, illustrative)	**Amount**
Assets — resources available to generate value	
Cash	4,200
Accounts Receivable	1,800
PP&E	900
Total Assets	6,900
Liabilities — obligations incurred to run the business	
Accounts Payable	700
Deferred Revenue	1,200
Total Liabilities	1,900
Equity — ownership issued to the owners	
Common + Preferred Stock	6,000
Retained Earnings	(1,000)
Total Equity	5,000

A = L + E

6,900 = 1,900 + 5,000

Assets: what the company owns.

Liabilities: what it owes.

Equity: the owners' residual claim.

Illustrative product/service P&L

Illustrative only — not the actual financial results of Spotify.

Product/service P&L ($000, illustrative)	Amount
Revenue (subscriptions + ads)	10,000
− Cost of revenue (royalties, hosting)	(7,500)
= Gross Profit	2,500
Gross margin	25%

Revenue from providing the product/service, the cost to provide it, and the gross profit that results.

Illustrative operating-expense P&L

Illustrative only — not the actual financial results of SpaceX.

Operating-expense P&L ($000, illustrative)	Amount
Gross Profit	2,500
− Selling & marketing	(900)
− Research & development	(1,100)
− General & administrative	(700)
= Operating Income / (Loss)	(200)

Selling costs, R&D spend, and overhead — the costs of running the business below gross profit.