FNCE90018 Corporate Financial Policy

FACULTY OF BUSINESS AND ECONOMICS · THE UNIVERSITY OF MELBOURNE · POSTGRADUATE

Full guide + ask Sia about FNCE90018

SIDE 1/2 · FINAL PRIORITIES · definitions · formulas · decision rules · comparisons · EXAM REVISION SHEET · S2 2026 · two-hour final · 60%

0 · Exam Map

COURSE FACTS

Tests 20% | Mid-sem | Final examination 60%

Assessment: in-class tests 20% (best five of eight); mid-semester test 20% (one hour); final examination 60% (two hours, covering the subject).

Permitted materials: not confirmed for this offering in the course materials we hold — check the exam instructions on the LMS.

REWARDED MOVE	VISIBLE EVIDENCE
Define	quantity, owner, date, units
Calculate	symbols, signs, denominator
Compare	same basis; changed input isolated
Judge	claim holder + reversal condition

EXAM CUE *The common thread is **incremental cash-flow reasoning**: connect valuation, financing, tax, agency and risk-management consequences; do not let a familiar ratio replace the decision.*

1 · NPV First

C1 · FOUNDATION

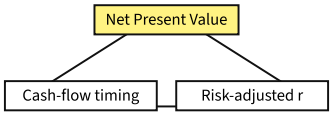
Net Present Value = present value of incremental project cash flows after subtracting the initial investment. ***Discount rate*** = required return translating cash flows at different dates to one valuation date.

WHEN VALUING A PROJECT

$NPV = \Sigma_{t=0}^{T} CF_t/(1+r)^t$

positive total → value creation under the stated rate

Stand-alone: test its NPV. **Mutually exclusive:** accepting one prevents the other, so compare value created on the same valuation date and risk-adjusted basis. Timing changes can change which project wins.



Source figure redrawn: NPV needs cash-flow timing and the appropriate discount rate.

Boundary: NPV comparisons remain conditional on incremental cash flows and an appropriate risk-adjusted discount rate. In a sensitivity test, change the input tied to *r*, hold other assumptions fixed, then recompute only affected lines.

1b · NPV Setup Card

BEFORE CALCULATING

WRITE FIRST	CONTROL QUESTION
Decision	stand-alone accept/reject, or rank mutually exclusive projects?
CF_t	incremental to acceptance; correct sign and date?
r	appropriate for the project's risk and financing assumptions?

2 · Build Project FCF

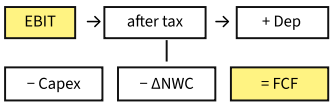
C2 · CAPITAL BUDGETING

Incremental cash flow occurs because the project is accepted and would not otherwise occur. ***Opportunity cost*** is the best feasible alternative use sacrificed. ***NWC*** = operating current assets − operating current liabilities committed to the project.

FREE CASH FLOW LINE

$FCF = EBIT(1-\tau_c) + Dep - Capex - \Delta NWC$

ITEM SEEN	TREATMENT	REASON
Project-caused operating flow	Include	incremental
Forgone rental/use	Include	opportunity cost
Sunk expenditure	Exclude	occurs regardless
Depreciation	tax route, then add back	non-cash
Increase in NWC	subtract	cash committed
Financing item	keep out of project FCF	valuation framework handles it



Source figure redrawn: earnings become value only after the full cash-flow bridge.

Boundary: only cash flows caused by the decision belong in project value; financing is reflected through the valuation framework. Predict the sign before arithmetic, then audit date, unit and working-capital direction.

2b · FCF Error Audit

WHERE MARKS LEAK

Translation: did the scenario change a project consequence? **Calculation:** are tax, add-back, Capex and ΔNWC signs explicit? **Interpretation:** does the final sentence identify value to the correct decision owner? Repair the first failed line, not the polished total.

LINE	QUESTION TO SAY ALOUD
$EBIT(1-\tau_c)$	is this operating profit after corporate tax?
+ Dep	was the non-cash charge already inside EBIT?
− Capex	is the investment cash outflow dated correctly?
− ΔNWC	does an increase tie up cash for operations?

For each disputed item, compare the world with acceptance against the world without acceptance. That counterfactual reveals whether the line is genuinely incremental. A resource can already be owned yet still have an opportunity cost; the relevant question is whether committing it sacrifices the best feasible alternative use.

3 · Match Risk to Return

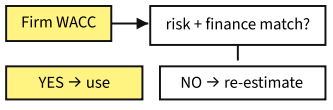
C5 · WACC

WACC = market-value weighted required return on debt and equity under the financing assumptions used. ***Cost of equity*** compensates equity risk; ***cost of debt*** is the current required return before the WACC tax adjustment.

PROJECT DISCOUNT RATE CHECKPOINT

$WACC = E/(D+E)\cdot r_E + D/(D+E)\cdot r_D(1-\tau_c)$

CHECK	REQUIRED ALIGNMENT
Weights	market values of D and E
Debt return	current required return
Tax	apply $(1-\tau_c)$ to debt term
Project	risk and financing match benchmark
Decision	discount matching project cash flows



Source figure redrawn: the company rate is a benchmark, not an automatic project rate.

Boundary: a company-wide WACC is unsuitable when project risk or financing differs materially from the firm's benchmark. If operating risk rises while capital mix is unchanged, first revisit the required return; then trace the changed discount rate into NPV.

3b · Financing Claims

C3 · COMPARE INSTRUMENTS

INSTRUMENT	WHAT TO INSPECT
External equity	ownership, control, information, flexibility
IPO	first public sale of a private firm's shares
Debt contract	promised payments, priority, enforcement

The cheapest quoted instrument is not necessarily the lowest-cost policy after control, distress and information effects. When replacing private equity with public debt, identify the rights, signals and constraints that change—not just the quoted return.

ANSWER FRAME

External equity: ownership funding raised outside the existing shareholder group. **IPO:** first public sale of a private firm's shares under the applicable issuance process. **Debt contract:** financing agreement specifying promised payments, priority and enforcement rights.

DIMENSION	EQUITY ROUTE	DEBT ROUTE
Claim	ownership	promised payment
Governance	control consequences	priority/enforcement
Information	issuance signal/process	contract and lender constraints
Flexibility	no promised debt payment	specified obligations

4 · Leverage: Value Bridge

C6–7

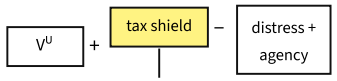
Levered firm value is operating-asset value with debt financing. ***Interest tax shield*** is value from deductible interest reducing corporate tax under the stated debt policy. *D/E* relates market values of debt and equity.

TAX SHIELD CHECKPOINT

$V_L = V_U + \tau_c D$

FULL TRADE-OFF CHECKPOINT

$V_L = V_U + PV(tax\ shields) - PV(distress\ and\ agency\ costs)$



= V^L judgement

Source figure redrawn: financing side effects sit beside operating value.

IF SCENARIO SAYS...	REASSESS...
debt less persistent	how much tax-shield value belongs in V_L
distress probability rises	PV of distress/agency costs; financing mix
tax rate unchanged	do not manufacture a tax change
D/E changes	market-value mix and claim-holder effects

Tax benefit ≠ free value. Its value is conditional on debt persistence and must be weighed against distress and incentive costs.

4b · Distress & Agency

C7 · JUDGEMENT

Financial distress = value loss and constraint from difficulty meeting promised obligations. ***Agency cost*** = loss when decision-makers' incentives diverge from other claim holders. ***Trade-off theory*** balances debt benefits against distress, agency and related costs.

No universal optimal debt ratio: judge the probability and magnitude of costs in the stated case.

STEP	LEVERAGE JUDGEMENT
1 · Operating value	hold V_U separate from financing side effects
2 · Benefit	identify PV of tax shields under the debt policy
3 · Distress	assess probability and value loss/constraint
4 · Agency	identify divergent incentives across claim holders
5 · Information	state how the financing choice changes the account
6 · Decision	weigh marginal benefits against marginal costs in this case

If distress probability rises without a tax-rate change, isolate that changed input: the tax term does not move merely because distress moved. Reassess expected costs and the preferred financing mix, then state the condition under which the recommendation would reverse.

5 · Lease or Own?

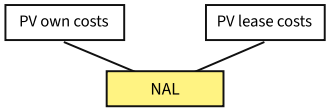
C4 · AFTER-TAX PV

Operating lease analysis emphasises access and operating flexibility. ***Finance lease*** transfers substantial financing exposure. A ***lease-equivalent loan*** replicates relevant lease payments and tax consequences.

NET ADVANTAGE TO LEASING

NAL = PV(costs of owning) - PV(costs of leasing)

BUILD BOTH SIDES ON...	ASK
cash-flow basis	which payments occur only under this choice?
after-tax basis	who can use each tax consequence?
same date	have all flows been discounted consistently?
risk allocation	who bears asset/financing exposure?
replicating debt	what loan pattern matches lease flows?



Source figure redrawn: compare alternatives only after matching tax, date and risk.

Classification labels do not decide the lease choice. Relevant cash flows, tax positions and risk allocation do. A changed lessee tax position requires rebuilding the affected after-tax line, not relabelling the arrangement.

5b · Finance Comparison

C3–4 · CONTRAST

QUESTION	EQUITY/DEBT	LEASE/OWN
Object	claim on firm cash flow	access/finance an asset
Primary comparison	rights + promised payment	after-tax present cost
Must retain	control, information, flexibility	payments, tax, allocation of risk
Trap	quoted cost alone	classification alone

LEASE DECISION SEQUENCE

1. Define the asset access required and the relevant decision owner.
2. Lay out ownership cash costs, tax consequences and timing.
3. Lay out lease payments, tax consequences and timing.
4. Discount both alternatives to the same date on a consistent risk basis.
5. Compute NAL and test the pattern against the lease-equivalent loan.
6. Explain which tax position, flexibility or risk allocation drives the result.

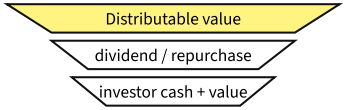
6 · Payout Policy

C8 · SEPARATE VALUE

Dividend distributes corporate cash or shares under declared terms. ***Repurchase*** returns cash to participating shareholders while the firm buys its own shares. ***Ex-dividend price*** is the price after the declared dividend no longer attaches to a new purchase.

CUM/EX CHECKPOINT

$P_{cum} = D_0 + P_{ex}$



Source figure redrawn: payout method follows, rather than creates, operating value.

Boundary: separate the payout method from operating cash flows that created distributable value. When dividend becomes repurchase, trace cash and ownership consequences for participating and continuing shareholders.

7 · Acquisition Value

C9 · ACQUIRER VIEW

Synergy = incremental combined value available only from combination. ***Control premium*** = amount above target stand-alone value paid for control. ***Acquisition NPV*** = acquirer value after obtainable synergy, premium and transaction consequences.

ACQUIRER CHECKPOINT

$NPV_{acquirer} = Synergy - Premium$

RESULT	JUDGEMENT
Synergy > premium	positive before other transaction consequences
Synergy = premium	gain transferred; acquirer break-even on this comparison
Synergy < premium	negative acquirer value

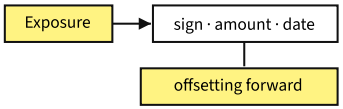
A strategically attractive combination can destroy acquirer value when the paid premium absorbs obtainable synergy. Keep total synergy separate from value captured by the acquirer.

8 · Hedge the Exposure

C10 · DIRECTION

FORWARD PAYOFF CHECKPOINT

$\Pi_T = S_T - K$



Source figure redrawn: reverse the exposure and the required hedge direction reverses.

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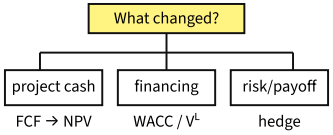
SELF-TEST DRILLS · ANSWER PATHS · JUDGEMENT CARDS · CLASSIC TRAPS

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SIDE 2/2 · 5 WORKED PATHS · if X → do Y · traps · exam-morning plan · SELF-TEST BEFORE READING · Cover answers · say the rule · trace the change

9 · Method Chooser

START EVERY DRILL HERE



claim holder + reversal condition

New decision figure: classify the changed object before choosing a formula.

IF YOU SEE...	DO THIS
cash-flow timing	re-date CF; recompute NPV
sunk cost / forgone use	exclude sunk; include opportunity cost
project risk differs	reject automatic firm WACC
debt persistence	reassess tax-shield PV
distress probability	reassess trade-off costs
lessee tax position	rebuild affected after-tax PV
dividend → repurchase	trace cash + ownership
bid premium rises	hold synergy; test acquirer NPV
exposure reverses	reverse offsetting hedge direction

FOUR-LINE ANSWER SPINE

1. **Fix** the case-specific quantity and scale.
2. **Trace** the operation or inferential link.
3. **Test** the strongest alternative or changed input.
4. **Conclude** inside the chapter boundary.

SELF-TEST *Before touching arithmetic, say: object, valuation date, decision owner, market-value balance sheet, assumption that could reverse the answer.*

10 · Formula Recall Grid

WRITE FROM MEMORY

NPV	$\Sigma\ CF_t/(1+r)^t$
FCF	$EBIT(1-\tau_c)+Dep-Capex-\Delta NWC$
WACC	$E/V\cdot r_E+D/V\cdot r_D(1-\tau_c)$
NAL	PV(own costs)−PV(lease costs)
Tax shield	$V_L=V_U+\tau_c D$
Trade-off	V_U+PV(TS)−PV(distress+agency)
Payout	$P_{cum}=D_0+P_{ex}$
Acquisition	Synergy−Premium
Forward	$\Pi_T=S_T-K$

10b · Boundary Recall

FORMULA + CONDITION

NPV	incremental CF + appropriate risk-adjusted rate
FCF	project-caused flows; financing stays in valuation framework
WACC	company rate fails when project risk/finance materially differs
Lease	labels do not decide; after-tax PV and risk do
Debt	tax benefit depends on debt policy, distress and incentives

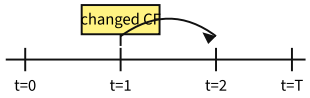
11 · Worked 1: Timing

C1 · 13 MARKS

Prompt: change the timing of one project cash flow and reassess which investment creates more value.

MARKS	ANSWER PATH
4	Fix NPV, valuation date and the affected CF_t.
3	Discount every project flow to that date using the stated appropriate rate.
3	Compare the mutually exclusive projects on the same basis; test whether rank narrows or reverses.
3	Conclude subject to incremental cash flows and risk-adjusted *r*.

`Only one timing change → replace affected CF_t/(1+r)^t → recompute project NPV → compare NPV_A vs NPV_B.`



Source figure redrawn: timing moves the discount exponent and can change project rank.

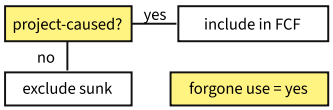
Final line: name the higher NPV after the timing change; state whether the original recommendation remains, narrows or reverses. Do not compare undiscounted totals.

12 · Worked 2: Rebuild FCF

C2 · 15 MARKS

Prompt: remove a sunk expenditure, add a forgone rental opportunity and rebuild the project cash-flow line.

4	Fix incremental cash flow: with-project minus without-project consequence.
4	Exclude sunk expenditure; include forgone rent as opportunity cost.
4	Insert ΔNWC with correct sign and period; keep financing outside project FCF.
3	Report the rebuilt FCF/NPV inside the incremental boundary.



New decision figure: causation admits project flows; opportunity cost is caused by acceptance.

Trap: "already paid" is not a project consequence; "resource already owned" can still carry a forgone alternative use.

12b · Project Trap Check

REPAIR THE LINE

Total rather than incremental CF	compare with-project against without-project
Sunk expenditure included	remove: it occurs regardless of acceptance

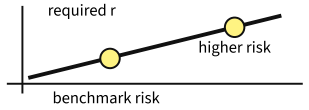
13 · Worked 3: Risk ↑

C5 · 11 MARKS

Prompt: raise project operating risk, leave firm capital mix unchanged, reconsider the discount rate.

MARKS	ANSWER PATH
3	Fix WACC as a market-value weighted required return under its financing assumptions.
3	Trace higher project risk into the defensible required return; do not treat unchanged D/E as unchanged project risk.
3	Check cost of debt and financing assumptions rather than changing unrelated inputs.
2	State whether the company rate remains a valid benchmark.

`Risk mismatch → re-estimate appropriate r → NPV = Σ CF_t/(1+r)^t → retest acceptance/ranking.`



Source figure redrawn: changed risk requires a defensible return before NPV is retested.

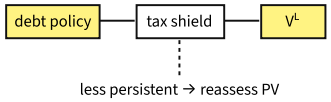
Answer check: the guide's limit is suitability, not a universal numerical direction divorced from cash-flow risk and financing assumptions.

14 · Worked 4: Debt Persistence

C6 · 13 MARKS

Prompt: reduce expected debt persistence and reassess tax-shield value in the levered firm.

4	Fix V_L and separate operating value V_U from financing side effects.
3	Trace persistence through PV of the interest tax shield; do not assume $\tau_c D$ applies outside its debt-policy assumptions.
3	Use D/E to test the financing mix and relevant claim holders.
3	Weigh the tax benefit against persistence, distress and incentive costs.



Source figure redrawn: debt-policy persistence controls how much tax-shield value survives.

Classic trap: copying $V_L=V_U+\tau_c D$ after the scenario has changed the debt-policy assumption.

14b · Risk + Debt Controls

KEEP ASSUMPTIONS VISIBLE

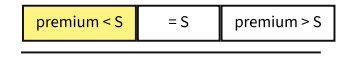
Firm D/E unchanged	does not prove project operating risk is unchanged
Company WACC supplied	test project comparability before use
Debt return shown	use the current required return before tax adjustment

15 · Worked 5: Bid Premium

C9 · 9 MARKS

Prompt: hold expected synergy constant, raise the bid premium, determine when acquirer value turns negative.

MARKS	ANSWER PATH
3	Fix synergy as incremental combined value obtainable only from combination.
2	Raise only the control premium; hold expected synergy constant.
2	Recompute $NPV_{acquirer}$=Synergy−Premium.
2	Conclude: negative when premium exceeds obtainable synergy, before other transaction consequences.



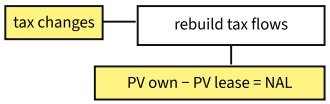
Source figure redrawn: premium determines how total synergy is split with the target.

Do not answer "the merger creates synergy". The task asks how much of that value remains with the acquirer after the premium.

16 · Lease Judgement Card

C4 · CHANGED TAX

If the lessee's tax position changes → identify only the tax-sensitive ownership and lease flows; recompute their after-tax PVs at a consistent date; rebuild NAL; test with the lease-equivalent loan; conclude on lower present cost and risk allocation.



Source figure redrawn: a tax change alters cash flows, not the definition of the lease.

Wrong shortcut	"finance lease means buy" / "operating lease means lease"
Correct basis	relevant after-tax cash flows + risk allocation
Control	replicating lease-equivalent loan

17 · Financing Instrument Card

C3

If private equity becomes public debt → map ownership/control removed or retained; map promised payment, priority and enforcement added; then discuss information and flexibility. Conclude on policy cost only after these effects—not from the quoted instrument alone.

Quoted return looks cheapest	add control, distress and information consequences
Instrument changes	trace rights, promised payment, priority and enforcement

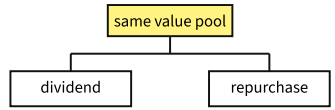
18 · Payout Drill

C8 · 7 MARKS

Prompt: replace an immediate dividend with a repurchase; trace cash and ownership consequences.

2	Fix dividend and distributable value as separate objects.
2	Trace cash to participating shareholders and ownership consequences for continuing holders.
2	Use ex-dividend price to test the valuation account.
1	Keep the conclusion separate from operating cash flows that created value.

`P_cum = D_0 + P_ex → isolate dividend from post-distribution price.`



Source figure redrawn: compare distribution mechanics without inventing operating value.

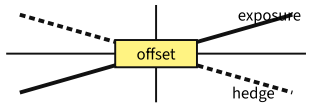
Trap: describing the method but never identifying whose cash flow or ownership changes.

19 · Hedge Drill

C10 · 11 MARKS

Prompt: reverse a commodity-price exposure and rebuild the forward position.

3	Name the value-sensitive exposure and its direction.
3	Select an offsetting hedge position; make the sign inspectable.
3	Match the forward's amount and timing to the exposure.
2	Conclude about distribution of cash flows, not a free expected-value gain.



Source figure redrawn: match opposite payoff sensitivity at the same horizon.

`Forward payoff = S_T-K. Reverse the underlying exposure → reverse the offsetting forward direction; retain amount and date matching.`

20 · Distress Card

C7

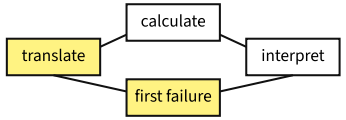
If distress probability rises while τ_c is fixed → do not change the tax term; increase attention to expected distress/agency costs; retest the preferred mix. Trade-off reasoning is case-conditional, not a universal debt ratio.

Payout described as value creation	separate method from operating cash flows
Repurchase substituted	trace cash and ownership for both shareholder groups
Synergy stated, premium omitted	compute value captured by the acquirer

21 · Classic Traps

DIAGNOSE, THEN REPAIR

CROSS-TOPIC TRAP	REPAIR SENTENCE
Wrong valuation object	name project, firm, equity holder or acquirer
Dates mixed	translate every cash flow to one valuation date
Ratio substitutes for policy	trace incremental cash flow, tax and risk consequences
Changed input spreads everywhere	hold unrelated facts fixed; recompute affected steps
Calculator output given as method	show symbols, units, signs and denominator
No reversal condition	state what would make the recommendation change



New control figure: repair the first failed move, then rerun the chain.

UNITS + SIGNS MICRO-CHECK

Before finalising any formula: define numerator and denominator; keep valuation date explicit; preserve cash-flow signs; use market values in WACC/D/E; distinguish firm value from equity-holder/acquirer value; state which assumption changed and which were held fixed.

22 · Exam-Morning Plan

LAST-WEEK REVISION

define → formula → change → judge

owner · date · units · assumptions

state one reversal condition

New recall figure: a compact verbal routine for every unseen scenario.

1. Write all nine formula checkpoints from memory; define every symbol.
2. Recite the ten chapter boundaries: what each method may and may not claim.
3. Run the five worked paths with answers covered; speak the four-line spine.
4. Use the trap table: explain why each shortcut fails and name the repair.
5. Finish with one changed-input drill per method: timing, opportunity cost, risk, debt persistence, distress, tax position, payout form, premium, exposure direction.

FINAL CONTROL *A number earns meaning only when variables, units, assumptions and comparison are explicit. The final sentence must answer the decision actually asked.*