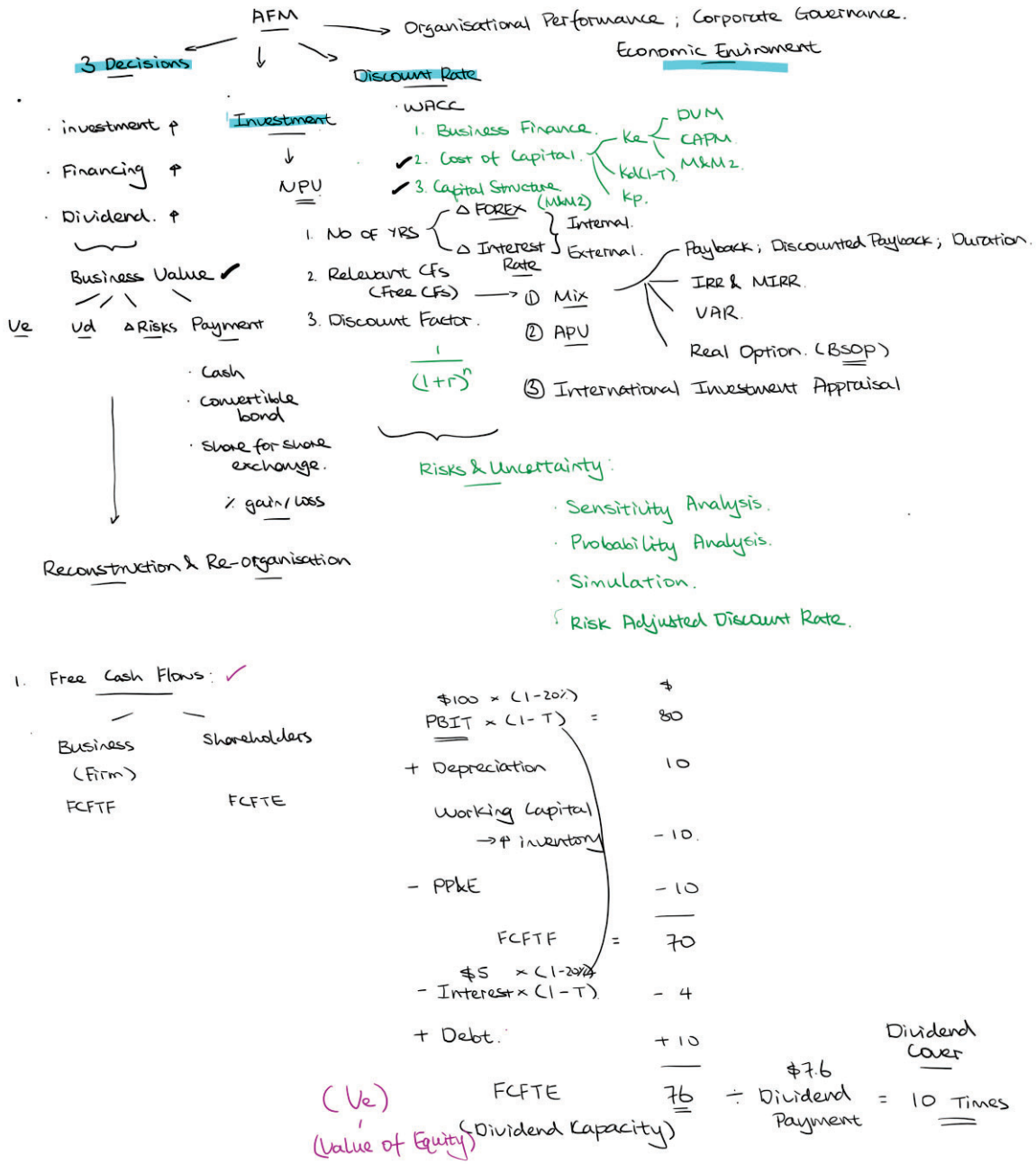

1. Free Cash Flows: ✓

Business (Firm) — FCFTF

Shareholders — FCFTE

	$
$100 × (1-20%) PBIT × (1-T)	= 80
+ Depreciation	10
Working Capital → ↑ inventory	- 10
- PPkE	- 10
FCFTF	= 70
$5 × (1-20%) - Interest × (1-T)	- 4
+ Debt.	+ 10
FCFTE	76

(Ve) (Value of Equity)

FCFTE $76 ÷ Dividend Payment $7.6 = Dividend Cover 10 Times (Dividend Capacity)

2. Payback ; Discounted Payback ; Duration :

YRS	Cash Flows / PV (Payback / Discounted Payback)	Cum CFs / PV
0	- $100	
(1)	+ $40	- $60
2	+ $70	
3	+ $1	$100 x

1YR + $\frac{60}{70}$ →

= 1.86 YRS

3. Duration :

$$\frac{\text{Sum PV} \times \text{YRS}}{\text{Sum PV}}$$

1. No of YRS to recover 100% PV. (if discounted at cost of capital.)
2. No of YRS to recover 100% Investment (if discounted at IRR.)
3. ↑ Duration ↑ Risk.

4. IRR & MIRR

- Relative Figures → simple to understand
- > cost of capital ✓
- Reinvestment assumption : IRR ✓ MIRR (at cost of capital.)

5. Value at Risk (VAR)

$= \sigma \times z \times \sqrt{T} \rightarrow (T)^{(0.5)}$

$\$30 \times 99\% \rightarrow 2.33 \times \sqrt{4} \rightarrow (2) = \$139.8$

95% → 1.65.

Over 4 years, 99% chance Projects value will NOT fall by More than $139.8.

6. Real Option:

Traditional NPV = $(2.98m)

+ Options { Call (BSOP) $9.53m
Put. $6.55m

- PV (Pa) = $38.75m.
- Cost (Pe) = $35 m.
- T (time before incurring costs) = 2 YRS
- Rf = 3.5%
- σ (Volatility) = 30%

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7. APV (Adjusted Present Value)

APV = Base Case NPV ± PV of Fin Effect

Operating CFs (Keu)

Financing CFs : Rf.

Issue Costs | Interest | Subsidiary

1. M&M 2: $K_{eg} = K_{eu} + (K_{eu} - K_d) \cdot \frac{D \times (1-T)}{E}$

2. CAPM: $K_{eu} = R_f + \beta_a (R_m - R_f)$

$\beta_a = \beta_e \times \frac{E}{E + D \times (1-T)}$

Issue Costs: I ✓ × $ × (1-T)

Interest: Int × T

Subsidiary: ① Int × T

② $\left(\frac{\Delta\%}{2\%} \times \$100\right) \times (1-T)$