Suparat Patarasupanit_6684069326 (FT27) FSA FINAL **\\ IFRS, US-GAAP**

CH1&2: Intro to FSA: use fin info to **evaluate** past, current, potential performance, and financial position for **economic** decision making (e.g. evaluate M&A, assign a bond rating, value security)
FS&supplementary info: BS, compre income, change in E, CF, Notes, MD&A, Auditor's reports
- **Notes:** required&form an integral part of FS. It includes significant accounting choices, explanatory detail about line items on FS, other disclosures e.g. commitments and contingencies.
- **MD&A:** unaudited, explains amount in FS, info on firm's prospects, forward-looking info.
* IFRS: management commentary includes: nature of business, mgt obj&strategy, significant resources&risks&relationships, results of operation&prospects, critical performance measures and indicators. *US-GAAP: also includes favorable/unfavorable trends, effect of inflation, off-balance-sheet obligations about contractual commitments. *Mgt's responsibilities: adopt appropriated acct policies, maintain good internal controls, present true &fair view of FS
- **Auditor's report**: by independent auditor express opinion on FS (mgt role) & is able to obtain reasonable, but not absolute, assurance that material misstatements are detected. (1) *Unqualified/clean/unmodified:* fairly presented (2) *Qualified:* some scope limitation/exception to acct std. (3) *Adverse:* not fairly presented (4)*Disclaimer of opinion:* are unable to issue an opinion
* US requires additional audit opinion on the company's internal control systems.
FSA framework: (1) Purpose&context of the analysis (2) Collect data (3) Process data (4) Analyze&interpret (5) Develop and communicate conclusions &recommendations (6) Follow-up
* Fin reports don't present all info needed & value of firm but info to help users estimate value
* IFRS by IASB based on principles, no LIFO, no extraordinary items under P/L, capitalized development cost if conditions satisfied * US-GAAP by FASB based on rules, extra items below P/L, treat development cost as expense, reversal of inventory and impairment is prohibited.
IFRS conceptual framework: OBJECTIVE: to provide fin info that is useful in making decision.
- **Fundamental qualitative characteristics:** *Relevance* (influence economic decisions or affect evaluations) & *Faithful representation* (faithfully representative is complete, neutral (absence of bias), and free from error. **– Characteristics enhance R&F:** Comparability, Verifiability, Timeliness, Understandability. – **Constraint:** benefits of info>cost, - **Assumptions:** accrual basis (record transaction when it occurs not cash transfer), Going concern: assume firm will survive.

CH3: Income statement: Rev + other inc + gains – expenses – losses = net income
- Muti-step (may be required by US-GAPP) shows gross profit but single-step does not
Revenue recognition: independent from cash movement, when risk&reward of ownership is transferred, when deliver goods&services. 5 steps model: identify 1) contract 2) performance obligations, 3) determine transaction price, 4) allocate transaction price, 5) recognize revenue when satisfy obligation **AIS&phone+internet bundle: recognize revenue by each product/service proportionally and also record contract asset **only allowed to recognize variable consideration e.g. not recognize bonus (if finish work) if not confident that the work will be finish on time.
**If firm is only an agent to sell products, it can only recognize %commission as revenue.
Expense recognition: recognizes when consume economic benefits & matched with revenues.
Separate non-recurring items from recurring: Discon't operations should be reported separately. They're reported when (group of) components of entity has been sold/disposed/considered held for sale -> no longer provide earning -> remove from analysis
Non-GAAP/street/pro forma earnings= GAAP earnings - exclusions (e.g. restructuring costs, acquisition costs, write-downs of impaired assets, and share-based compensation.)
Comprehensive inc = net income + OCI (includes 1) Foreign currency translation adj, 2) Unrealized gain/loss on derivatives as hedges, 3) unrealized gain/loss on available for sale securities, 4) cost of defined benefit post-retirement plans (not current), 5) revaluation surplus
*US-GAAP requires firm to report AOCI as a separate component of equity in BS.

CH4: Balance sheet (BS)/statement of financial position: Assets = Liabilities +Equity
- Assets: resources with future economic benefits which are expected to flow to entity.
- Liabilities: obligation from the past & settlement result in future outflow of economic benefits
- Equity (net assets): owners' residual interest in the company's assets -> not a measure of mkt/intrinsic value of firm's equity bcs BS is mixed model
- Operating cycle: the time from acquiring inventory to collecting cash from sales to customers.
- CA:1) Cash Equivalent 2) Trade/account receivables (AR): reported at net realizable value based on estimates of collectability {%of uncollectible = valuation allowance/total AR before net}
3) Inventory || **- NCA: 4) PPE:** cost method: historical cost – accumulated depreciation – impairment losses * US-GAAP: only cost model, not allow reversals of prior impairment losses
* IFRS: cost model or revaluation model -> can use diff for diff class of assets (same class, same model), allows reversals of prior impairment losses
5) Intangible assets: e.g. patents, licenses, trademarks, US-GAAP: cost, IFRS: cost/ revaluation
* Intangible assets with finite useful life: amortize & impair, / infinite: not amortize, impair (IFRS: annually, US-GAAP: after qualitative assessment)
*Goodwill: arises in business combination when price excess fair mkt value of net identifiable assets acquired, not a separately identifiable asset, cover separately in IFRS, not amor but impair
- CL: 1) Trade/account payable (AP), 2) Note payable, 3) Accrued expenses, 4) Deferred income/unearned revenue: receive payment in advance of delivery of goods&services
- NCL: **5) LT financial liabilities:** loan/notes/bond payable -> usually reported at amortized cost but fair value for bonds **6) Deferred tax liabilities**|| **- Shdr's equity: 1) Capital contributed by owners/common stock(CS)/share capital 2) Preferred shares 3) Treasury shares:** repurchased by firm (bcs firm has too much cash then distribute profit to shdr aside from dividend/ firm believes their stock is undervalued/ counteract diluted price from stock issuing to employees) **4) Retained earnings 5) Accumulated OCI 6) NCI**

CH5: Cash flow statement (CFS): 1) CFO (operating) 2) CFI (investing) 3) CFF (financing)

Classification of CF items	IFRS	US-GAAP
Interest received	Operating* / Investing	Operating
Interest paid	Operating* / Financing	Operating
Dividend received	Operating* / Investing	Operating
Dividend paid	Operating / Financing*	Financing
Taxes paid	Generally operating	Operating

Taxes paid items in IFRS like on gain from selling discontinue plant can be in CFO/CFF in line with event.
- Common size %revenue
Direct method: Specific source, not net, IFRS & US-GAAP (requires reconciliation) encourage
Indirect method: Begin with NI and adjust to CFO, IFRS&US-GAAP permit
*** Adjustments to NI: +-non-cash items** (+ depre exp, amor exp, depletion exp of natural resources, amor of bond discount – amor of bond premium), **+ non-operating losses** (loss on sales or write-down of assets/retirement of debt/investment under equity method) **– non-operating gains** (gain on sale of assets/retirement of debt/income on inv under equity) **+(-)increase (decrease) in deferred income tax liability +-time differences** [+ (-)decrease (increase) in current operating assets like AR, inventory, and prepaid exp + (-) increase (decrease) in current operating liabilities like AP and accrued exp
*Begin AR + rev - cash collection = End AR -> Cash collection = rev – (+) increase (decrea) in AR
*Begin invent+ purchase – COGS = End invent -> Purchase = COGS +(-) increase (dec) in invent
*Beg AP + purchase – cash paid to suppliers = End AP -> Cash paid = purchase – (+) inc(dec)AP
*Cash paid to suppliers = COGS + inc inventory – inc AP
- Non-cash transaction: one non-monetary asset for another, must be disclosed
CFS analysis: - mature firms have CFO as primary source of CF, - growth firms have -CFO early
- Large net income but poor operating cash flow may signal poor earnings quality

FCFF: = NI + non-cash charges + int exp(1-tax rate) – capex + cash from sale of PPE – working cap expen // or **FCFF** = CFO + int exp(1-tax rate) - FCInv
FCFE: = NI + non-cash charges – working cap investment – fixed cap inv + net new borrowing – net debt repayments // or **FCFE** = CFO – FCInv + net borrowing - net repayment
CF ratios: CF to revenue = $CFO \div Net\ revenue$, Cash return on assets = $CFO \div average\ assets$, CF per share = $(CFO - preferred\ div) \div \#CS$, **Int coverage** = $(CFO + int\&tax\ paid) \div int\ paid$
**conversion of convertible bond for C/S will be reported as supplementary info to CFS

CH6: Financial Analysis Techniques:
Common size: Vertical (PL%sales, BS%assets, CF%sales/assets/total in&out), Horizontal(%Δ)
Financial ratios: limitation: it is hard to compare btw firms with hetero/homogeneity oper activities, diff acct methods, and ratios may be diff by vendor & not relevant in every sectors
ACTIVITY/operating efficiency ratios: how well firm manages and utilize its assets
* Asset turnover = $revenue \div average\ total\ assets$; low means sales are sluggish, heavy inv in A
* Fixed asset turnover $revenue \div average\ net\ fixed\ assets$
* Inventory turnover = $COGS \div average\ inventory$ -> Inventory days = $365 \div inventory\ turnover$
^high invent day indicates obsolete invent or slowing sales/ low result in shortage & missed sales
* AR turnover = $revenue \div average\ AR$ -> days of sales outstanding = $365 \div AR\ turnover$
^high AR days indicates credit issues/ low better efficient but too low stringent credit policies
*AP turnover = $purchase \div average\ payables$ -> days payable outstanding = $365 \div AP\ turnover$
^high AP days indicates better efficiency/ too long could suggest impending liquidity issues
*Cash conversion cycle = AR days + inventory days – AP days ; lower -> better liquidity
LIQUIDITY ratios: How well positioned is the firm to meet its near-term obligations?
*Current ratio = $CA \div CL$; *Quick ratio = $(cash + ST\ mkt\ inv + AR) \div CL$;
*Cash ratio=$(cash + ST\ mkt\ inv) \div CL$;
*Defensive interval ratio *(how long firm can last w/o external cash)*= $(cash + ST\ mkt\ inv + AR) \div daily\ cash\ expenditures$; *daily cash expenditure=$total\ cash\ expenditures/365$
SOLVENCY ratios: How well positioned is the firm to meet its long-term obligations?
Debt ratios: lower is safer: *Debt-to-assets, *Debt-to-capital (debt+E), *D/E ratio,
*Financial leverage ratio = $average\ A \div average\ E$, Debt-to-EBITDA ratio;
Coverage ratios: int coverage = $EBIT \div int\ payments$, fixed charge coverage (*tells quality of preferred dividend*) = $(EBIT + lease\ payments) \div (int + lease\ payments)$
PROFITABILITY ratios: *ROE = $net\ income \div average\ equity = ROA * leverage$
*Dupont (3 steps): ROE = PM*asset turnover*leverage= $\frac{net\ income}{revenue} * \frac{revenue}{average\ assets} * \frac{average\ assets}{average\ equity}$
***Firm with product differentiation (high PM), cost leadership (high asset turnover)*
*Dupont (5 steps): ROE = tax burden*int burden*EBIT margin*asset turnover *leverage
ROE = $\frac{net\ income}{EBT} * \frac{EBT}{EBIT} * \frac{EBIT}{revenue} * \frac{revenue}{average\ assets} * \frac{average\ assets}{average\ equity}$; *gross/operating/net profit margin
VALUATION ratios: How does the firm's performance or fin position relate to its market value?
*P/E ratio: firm with high P/E is valued highly by mkt or have low earnings per share (growth firm)
^earnings can be manipulated/affected by non-recurring earnings -> use *P/CF or *P/S (use sales per share) if negative earnings // *P/BV (book value of equity per share) >1 means future profitability is expected to be higher than required rate of return
*Dividend payout ratio =$div\ per\ share \div earnings\ per\ share$; *Div yield=$div\ per\ share \div price$
EQUITY ANALYSIS: 1)DDM: $\boldsymbol{P_0} = \frac{D_1}{(1+r_e)^1} + \cdots + \frac{D_t}{(1+r_e)^t} + \frac{TV_t}{(1+r_e)^t}$; TV=0 if limited life project,
TV = $\frac{D_t}{r_e}$ if div stays the same forever, TV = $\frac{D_t*(1+g)}{(r_e-g)}$ if div grows at constant growth rate (g)
**DDM cannot be used for no div, div are distribution not creation of value, M&M div policy is irrelevant to valuation in eff mkt (firm value driven by oper&inv decision), ignore stock repurchase
2) Residual income model: Value is created when it earns a return higher than its' required cost of capital: $\boldsymbol{P_0} = \boldsymbol{BV_0} + \frac{NI_1 - (r_e * BV_0)}{(1+r_e)^1} + \cdots + \frac{NI_t - (r_e * BV_{t-1})}{(1+r_e)^t} + \frac{TV_t}{(1+r_e)^t}$; TV=0 no abnormal return, TV =$\frac{RI_{t+1}}{r_e}$
residual income stays the same forever, TV=$\frac{RI_{t+1} * (1+g)}{(r_e-g)}$ residual income grows by g
^adv: value driver, used to value no div firms, disadv: earning obscured due to accounting complexity, depends on quality of accounting, incorporates public info
CREDIT ANALYSIS: Credit risk: risk of loss due to debtor's failure to make a promised payment.
*3 credit rating agencies: Moody's, Standard and Poor's (S&P), and Fitch Group.
Business&Geographic segments: disclose separate info if segment contributes >=10% of the combined operating segment's revenue/assets/profit & any single customer with 10% of firm's rev

CH11&17: Financial reporting quality & earning quality:
*Financial Reporting Quality:decision-useful info, faithful representation, compliant with standards [relevant, neutral, free from errors] *Earning quality: sustainable activity, adequate returns
***Quality spectrum:(1)GAAP** decision-useful, sustainable& adequate returns [High FRQ&EQ]
(2)GAAP decision-useful, low EQ due to non-recurring/insufficient return on inv to sustain company e.g. increase in net income even sales decreased due to change in exchange rate
(3) Within **GAAP** but biased acct/presentation choices: aggressive (increase reported performance e.g. low estimates of bad debt) and conservative (decrease current, increase future reported), biased presentation: obscure unfavorable and emphasize favorable information
(4) Within **GAAP** but earnings management (EM): <intentionally!>, Real EM (defer R&D exp to next period), Accounting/**accrual**-based EM (change acct estimates to meet earnings targets)
(5) NOT GAAP, Non-compliant acct: recognize rev too early & manipulate the timing of expense
(6) Fictitious/ Fraudulent reporting
2 main earnings benchmarks: same Q last yr EPS &analyst concensus EPS for current yr
***Motivations for low FRQ:** mask poor performance, meet/beat mkt expectation, increase compensation linked to reported earnings, avoid violation of debt covenants
***Conditions to issuing low FRQ:** 1) opportunity (poor internal control/ineffective monitoring of controls) 2) motivation (financial/work pressure) 3) rationalization (justify dishonest actions)
*Requirements of the use of non-GAAP/non-IFRS measures: define, why it is meaningful/relevant to users, Reconcile non-GAAP measures to most comparable GAAP measures/reconcile non-IFRS measures to IFRS measures, Display comparable GAAP measure with equal prominence
Acct choices: ***Revenue recognition:** timing & amounts
Expense: (1) *inventory CF: FIFO suitable for products that can expire (higher end inventory and lower COGS for the current period with higher cost)/weighted-average cost (non-expired) **(2) *Depreciation:** Straight-line method, Accelerated method, Activity-based method
Warning signs: Rev reg: compare AR with revenue (trend, turnover, AR days) with industry peer
***Inventory** (consider costing method, reserve for obsolescence): its growth relative to sale growth, poor mgt, obsolescence, future write-offs, overstated current gross&net profits
***Long-lived assets** (consider life spans, changes in depre lives, write-downs, policies, capitalization of e.g. R&D): if policy is outlier, cross-check asset turnover &profitability margin
***CFO:** CFO<-> net income ***Allowances:** reserve for doubt acc, change, collection experience
***Further analysis:** 4th quarter surprises, presence of related-party transactions, non-recurring
Company culture: influence FRQ: gender, overconfident managers(unrealistic beliefs->overstate, self-attribution bias->take credit), narcissistic managers (self-focus&self-entitlement)
CF quality: Corporate life cycle&industry profile: start-up (negative CFO/CFI), mature(positive CFO, sustain sources, adequate to cover capex/div/debt, low volatility, less easily manipulated)
BS quality:high report(completeness, unbiased, clear), high result(optimal leverage, liquidity, eco successful A allocation)/Sources of info risk: notes, audit opinion, discretionary change in auditor,.

CH7: Inventory(invt): raw mat, work-in-process, finished goods || IFRS not permit LIFO!!
*CIF-port of destination: seller responsible for shipping& transporting costs and buyer responsible/record as inventory when cargo has reached buyer's port
* FOB-port for shipment: buyer can record invt as it has shipped on board of shipment

Cost included in invt: costs of purchase net discount, import duties and taxes, transport and handling, transport insurance, cost conversion NOT abnormal costs(waste), storage cost(not necessary), admin overhead, selling costs are expenses, ads&promotion
** Begin inventory + Purchase = Good available for sale = Ending inventory + COGS
Invt valuation methods: 1) Specific identification 2) FIFO 3) LIFO 4) weighted average cost
Periodic invt systems: determine invt value & COGS at the end of acct period
EX: Purchase 100 units @$110, then sold 80 units & purchase another 200 units@$100, then sold 100 -> Good available = 100*$110+200*$100 =$31K, Avg cost=($31K/300)=$103.3 per unit, Ending invt=120(remaining unit)*$103.3(avg cost), COGS=Good available - Ending invt
Perpetual invt systems: continuously updated COGS&Avg cost, moving average,
EX: [Jan purchase 100@$110, then Apr sold 80->COGS=80*$110 and remain 20 units]
[July purchase 200@$100->avg cost = $\frac{(20*\$110)+(200*\$100)}{220}$ = $100.91, sold 100 remains 120 units-> COGS = 100*$100.91][End invt=120*$100.91]
FIFO vs LIFO :***Cost*↑: *FIFO low COGS&higher GP&high end invt&lower CFO higher relative taxes, LIFO high COGS&low GP(lower inc tax->higher CFO from tax savings)&low end invt***
*LIFO reserve = Ending invt FIFO – Ending invt LIFO => *FIFO invt = LIFO invt + LIFO reserve
*FIFO COGS = LIFO COGS – (+) Increase (decrease) in LIFO reserve
*FIFO net income= LIFO net inc +{+(-) increase (decrease) in LIFO reserve * (1-tax rate)}
*FIFO liabilities = LIFO liabilities + accumulated DTL [(Yr1+Yr2:increase in reserve*tax rate)]
*FIFO equity = LIFO equity + after tax increase in profit [Y1+Y2:after-tax rate*increase in reserve]
*LIFO liquidation occurs when older LIFO invt is sold (end LIFO reserve< begin LIFO reserve)
^ if cost rise: older&lower invt used in COGS will causes increase in GP -> not sustainable
*** Invt method change:** IFRS: require retrospective approach, US-GAAP: change from LIFO to other requires retrospective, from other to LIFO requires prospective
Invt adjustments: Invt (cost) – allowance for valuation
IFRS: lower of Cost or Net realizable value [NRV=estimated sales proceeds net of direct completion&selling cost] ;allows reversals of prior write downs in P/L (up to previous write down)
US-GAAP (not allow reversal): lower of Cost or Mkt value [NRV– normal profit margin <= Mkt<=NRV]; Replacement cost, NRV, NRV-PM Take "the middle" as the market value
*Inventory write-downs give the appearance of a company having managed its inventory more efficiently, but write-downs of inventory can reflect poor inventory management.
- If record: Δ in allowance = + (-) then COGS will be higher (lower)
- If not record: Δ in allowance = + (-) then COGS will be lower (higher) and NI will be + (-) higher (lower) in allowance*after-tax rate

CH8: Long-lived assets
-Capitalize purchase price, delivery, install&testing, maintenance that extend useful life
Borrowing cost: capitalize int exp as part of invt (for sales)/PPE (own use) -> in CFI ; interest coverage ratio (EBIT/int payment) should include both capitalized and expensed portions
Adjusted interest coverage: EBIT = EBIT in P/L + amortized of deferred financial costs,
int payment = int exp in P/L + capitalized interest exp
IFRS: income earned temporarily investing borrowed money decreases borrowing costs eligible for capitalization. || **Acquisition of intangible assets:**
1) Purchase: recorded at fair value = purchase price
2) Developed internally (R&D): generally expensed <IFRS: can capitalize in development phase when project will give economic benefit for sure> <US-GAAP: only software development>
3) Acquired in bus com: identifiable assets are recorded at fair value, if acquisition price > identifiable assets => GW
Depreciation methods: 1) Straight line method (constant) = (cost-residual)/useful life
2) Double declining method(DDM);depre = begin net book value *(1/useful life)*2 | end at residual
3) Units-of-production method: depre per 1 unit of product=(cost-residual)/useful life ;
^Depre expense = actual units produced * depre per unit cost
*DDM vs. straight-line: earlier DDM has higher depre exp -> lower PM & ROA but higher later
^ lower average total assets in earlier periods -> higher asset turnover ratio
Revaluation model (under IFRS only):
Case1: Fair value of PPE exceeds carrying amount->record as revaluation surplus in OCI
Case2 after 1: Fair value of PPE lower than carrying amount->deduct from revaluation surplus in OCI first then the remain is recorded as loss on revaluation in P/L
Case3: Fair value of PPE lower than carrying amount->record as loss on revaluation in P/L
Case4 after 3: Fair value of PPE exceeds carrying amount-> record gain on revaluation in P/L first then remain is recorded as revaluation surplus in OCI
Impairment of assets: IFRS: impair loss = carrying amount – recoverable amount [higher of fair value if sold less costs to sell and its value in use] || US-GAAP: 1) impair if carrying amount > undiscounted expected future CFs 2) impair loss = carrying amount – fair value if sold
Derecognition: Sale: gain/loss = sales proceeds – carrying amount of assets
*Total useful life=histo cost/annual depre exp, estimated age=accu depre/depre exp ,
remaining life=net PPE/depre exp||**Inv property** earn rent/cap appre-> cost model rather than FV

CH9: Income tax *DTA&DTL are in BS -> it will be accumulated across years
Deferred tax assets (DTA): an increase in taxes saved in the future period due to a temporary tax difference => when **taxable inc >pre-tax inc** => Actual inc taxes payable will exceed the financial accounting income tax expense
EX: by the end of yr1, client paid rental $10K in advance=> taxable inc of 130K > acct inc of 120K

Acct revenue	Taxable rev	**Excess tax>acct**	Pre-tax acct inc	Taxable inc
Yr1: $120K	$130K	130-120=**+$10K**	$70K	10+70=$80K
Yr2: $120K	$110K	110-120=**-$10K**	$70K	-10+70=$60K
Total: $240K	$240K	**0**	$140K	$140K

Y1: **DTA**=excess of tax over acct*tax rate=**$10K***30%=$3K, **Inc tax payable**=$80K*30%=$24K, Equity -inc tax exp = pre-tax acct inc*tax rate = -$70K*30%=-$21K
Y2: **DTA** = **-$10K***30%=-$3K, **Inc tax payable**=$60K*30%=$18K, Eq – inc tax exp = $70K*30%
Deferred tax liabilities (DTL): an increase in taxes payable in the future period due to a temporary tax difference. => when pre-tax inc > taxable inc | **EX:** use DDM for tax purpose

Acct depre (straight)	Taxable depre (Double DM)	**Excess tax>acct (DDM-Straight)**	Pre-tax acct inc	Taxable inc (less than acct)
Yr1: 19K	Cost*(1/life)*2=40K	40K-19K = **+21K**	$100K	=100K-21K=79K
Yr2: 19K	^remain value=24K	24K-19K = **+5K**	$100K	=100K-5K=95K

** Total by the end of useful life of acct decre = taxable depre
Y1:**DTL**=excess of tax over acct*tax rate=**$21K***30%=$6.3K, **Inc tax payable**=79K*30%=$23.7K, Equity – inc tax exp = -$100K*30%=-$30K
Carrying amount vs. tax base: e.g. DTA: carrying L (unearned revenue) > tax base L (0)
*DTA if Assets: tax base>carrying amount & Liabilities: carrying >tax base
*DTL if Assets: carrying amount>tax base & Liabilities: tax base>carrying
Permanent differences: Income or expense items not allowed by tax legislation, Tax credits for some expenditures that directly reduce taxes.

CH10: Long-term liabilities: Price of bond by FV=-face, PMT=-c*FV, I/Y=mkt rate, N-> cpt PV
Int exp = effective interest rate per period***beg** carrying amount *time; **EIR**= mkt int rate
Cash interest payment (coupon) same every periods = principal * coupon rate per period
Discount bond:coupon rate < mkt rate =>cash received or sales proceeds (PV)< face value (FV)
Carrying amount of bond at initial (t=0) in L= face value – discount = cash receive in A
Paying int exp by end of yr: amortize discount by adding =excess of **int exp**>**cash int payment**
Premium bond: coupon rate >mkt rate=>cash received or sales proceeds (PV) > face value (FV)
Carrying amount of bond at initial (t=0) in L= face value + premium = cash receive in A
Paying int exp end of yr:amortize premium by subtract=excess of **cash int payment**>**int exp**
*IFRS and US GAAP require disclose fair value of financial liabilities unless the fair value cannot be reliably measured.
Redeem bond earlier than maturity: 1) Eliminate carrying value of bond, 2) record cash paid, 3) Gain/loss= net bond payable or carrying value – repurchase payment (depends on mkt rate)
Debt covenants: restrict activities 1) affirmative: requires certain actions e.g. maintain ratios, 2) Negative: not to take action e.g. not pay dividend or do risky decision
LEASES (annuity due = payment begin): contract btw owner (lessor) and user of asset (lessee)
* Advs: less costly, fixed int rate, less restrict contract, reduce risk of obsolescence, residual value
*** Lessee recorded a right-of-use (ROU) asset and lease liability:**
- At t=0: find PV of ROU(A) or lease liability(L): FV=0, PMT=-constant payment, I/Y=int rate, N=number of payments or no. of contract periods -> cpt PV*(1+int rate) or use BEG mode
- At t=0: pay 1st payment (cash ↓, lease liability ↓),
- At end t=1: pay int expense = beg net lease liability * int rate & deduct ROU by depreciation
***Lease US-GAAP:** finance lease (same as IFRS's ROU), operating lease (renting -> as expense)
*IFRS: interest paid can be in CFO or CFF, US-GAAP: only CFO
Pension &other post-employment benefits: **1) Defined contribution pension plan (popular):** company contributes an agree-upon (defined) amount (pension exp) into the plan. & amount of benefit depends on investment performance| **2) Defined benefit pension plans:** a company makes promises of future benefits to be paid to the employee during retirement. & benefit based on plan formula and contribution from employer depends on current period estimate &inv perform

CH13: Intercompany investment, business combination: classify based on degree of control

In financial assets	In associate	Business combination	Joint venture
Not signi control	Significant	Controlling	Shared control
%owner <20%	Btw 20% to 50%	>50%	
* FVTPL [trading] * FVOCI * Amortized cost (debt)	Equity method Earn %	Consolidation btw parent and subsidiaries	IFRS: equity method

*For amortized cost, fin assets must meet business model test (held for collect contractual CFs) & CFs characteristic test (CFs solely payments of principal and int on principal)
[1] Financial assets:
Debt investment: held-for-collection (amor), held-for-collection and selling (fair), trading (fair)
EX: Fair value: do the amortized cost first (int exp calculated from mkt rate*carrying amount w/o fair value adjustment), then add/subtract unrealized gain/loss on FV adjustment from carrying amount (=fair value - carrying amount before adjust FV)
Equity inv (hold<20%): trading (fair, unrealized P/L), non-trading (fair, unrealized OCI)
- dividends declared, gain and losses from sale can be recognized in P/L
- t=0 record investment at cost, no transaction occurs if invested firm report net income,
if fair value of share change->investment +(-) gain (loss) and record unrealized gain (loss) in P/L or OCI, if firm pay dividend-> cash↑ and dividend income ↑
Reclassification of fin assets: reclassify equity inv is not permitted, debt inv is only permitted if business model (obj for holding) for fin assets has changed, no restatement of prior periods
[2] Investment in associates [Equity method] (hold 20-50%):
End inv in associates = beg inv or cost + %owner[+(-)net profit(loss) – dividend] – amortized exp
- If associate reported net income => investment ↑ by *%owner & investment income in P/L↑
- If associate pay cash dividend=> cash ↑ and investment ↓ by *%owner
- No transaction occurs if fair value of associate's share changes
If investment cost (price that buy) >(%owner book net assets (A-L)) -> the excess purchase price are: (1) %owner*excess identifiable fair value > BV asset -> amortized by remaining life of asset (land is not amortized) (2) Goodwill
EX: purchase price = $500K for 30%, BV net assets = $1.2M, Excess PPE FV of BV=$300K, PPE have 10 yrs of remaining life, reported income is 100K and pay dividend of 50K
> Excess purchase price =500K-(30%*1.2M)=140K, attribute to PPE=30%*300K=90K, GW=50K
> End inv = 500K + 30%(100K-50K) – (90K/10) = 506K = %owner*associate net asset by the end of year +unamortized excess price =%*(asso beg net asset+net inc- dividend)+unamor excess p
Transaction with associate: *upstream sale(down) investee sells(buy) goods to the investor*
Upstream sale: Equity income = %owner*(net income- profit from upstream) – amortized exp
Downstream sale: Equity income = %owner*(net inc) – share of unrealized profit – amor exp
EX: owns 25%, amortize of excess price related to undervalued assets =8K, investor sold 96K of inventory to investee for 160K, investee sold 120K of this in 2017 and remainder in 2018, investee reports net income of 800K in 2017 and 820K in 2018
> Investor profit from this sale = 160K-96K=64K -> investee can sell (120/160) = 75% = unsold 25% -> unrealized profit in 2017 = 64K*25%=16K => investor's share of unrealized profit= 25%*16K = 4K => Equity inc in 2017= (25%*800K) – 4K – 8K = 188K , Equity inc in 2018 = (25%*820K)+4K-8K=201K
[3] Business combination[>50% has control]: M[X+Y=X], A[X+Y=(X+Y)], conso[X+Y=Z]
***Acquisition method:** Identifiable A&L of the acquired com are measured at fair value on t=0.
- A&L that were not previously recognized must be recognized by acquirer (patent, brand, tect)
**Consolidates BS = Parent BV B/S + Subsidiary FV B/S for all items except GW and NCI
- Acquirer can reclassify financial A&L |- When acquisition price > fair value of net assets->GW
IFRS: Partial GW = Purchase price - %owner*fair value of identifiable assets and liabilities
NCI = %NCI*fair value of identifiable assets
US-GAAP/IFRS: Full GW = total fair value of subsidiary – fair value of identifiable net assets
Capital stock (par) = $par*# of share issued |Additional paid cap=$purchase price – $capital stock
NCI=NCI%*fair value of subsidiary
Impairment of GW: IFRS: Impairment loss = Carrying amount of cash generating unit – recoverable amount || If impairment loss exceeds GW then the remaining would be allocated on pro rata basis to other non-cash assets within the unit
US-GAAP: Impairment loss if fair value of unit<carrying value => find implied GW = FV of reporting unit – net assets of reporting unit => impair loss = carrying value of GW – implied GW
When acquisition price is less than fair value: bargain purchase acquisition -> recognize gain in P/L = fair value of identifiable net assets – purchase price

CH: convertible securities and EPS *stock div & stock split (-R/E + C/S not affect assets)*
Basic EPS = (NI – preferred dividend)/weight average no. of share outstanding
- Stock dividend and share splits are treated retroactively (prior not after)
EX: share@1 Jan =60M, share issued@1 Mar=12M, stock dividend@ June 1=10%, repurchase as treasury stock @1 Nov=8M=>#C/S= $\left(60M*1.1*\frac{12}{12}\right)+\left(12M*1.1*\frac{10}{12}\right)-\left(8M*\frac{2}{12}\right)=75.67M$
Diluted EPS (if converted method) = $\frac{\text{Net income}}{\text{weighted average no.of CS+new CS issued at conversion}}$
Diluted EPS if convertible debt only = $\frac{\text{net income+convertible debt interest*(1-T)-preferred dividend}}{\text{weight \#CS+additional CS that would have been issued at conversion}}$
Diluted EPS if treasury stock (option) method =

$$\frac{(\text{net income}-\text{preferred dividends})}{\text{weight \#CS}+\left[\left(\frac{\text{new share from option exercise}}{-\text{shares that could be purchased with cash proceeds from exercise}}\right)*(\text{proportion of yr fin instru outstanding})\right]}$$

>Share that could be purchased with cash proceeds from exercise = (#share if exercise all options*exercise price)/mkt price average per share