Guideline	R18 Intercorporate Investments
Sessions and readings	SS5 Financial Reporting and Analysis: Inventories and Long-lived Assets R16 Inventories: Implications for Financial Statement and Ratios R17 Long-lived Assets: Implications for Financial Statements and Ratios SS6 Financial Reporting and Analysis 2 R18 Intercorporate Investments R19 Employee Compensation: Post-Employment and Share-Based R20 Multinational Operations SS7 Financial Reporting and Analysis Quality of FR and FSA R21 Evaluating Quality of Financial Report R22 Integration of Financial Statement Analysis Techniques
Topics	a. Describe the classification, measurement, and disclosure under International Financial Reporting Standards (IFRS) for 1) investn in financial assets, 2) investments in associates, 3) joint ventures, 4) business combinations, and 5) special purpose and variable int entities. b. Distinguish between IFRS and US GAAP in the classification, measurement, and disclosure of investments in financial assets, investments in associates, joint ventures, business combinations, and special purpose and variable interest entities. c. Analyze how different methods used to account for intercorporate investments affect financial statement and ratios.
a. b. c.	IFRS 9 1. Accounting for investments Classification of intercorporate investments is based on degree of influence or control

	Ownership	*Degree of Influence*	*Accounting Treatment*
Financial Assets	Less than 20%	No significant influence	cost or market (Held to available for sale, fair va through profit or loss)
Associates	20% - 50%	Significant influence	Equity
Business combination	More than 50%	Control	Acquisition
Joint Ventures	Varies	Control is shared by two or more investors	Equity (proportionate consolidation method us rare cases)

2. Financial Assets(Current Standard)

	Held to maturity (debt securities)	***Fair value through profit or loss*** (held for trading or designated at fair value)	***Available for sale***
Reported in balance sheet (Carrying value)	Amortized Cost	Fair Value	Fair Value
Income Statement	-Interest Income -Realized gain or losses	-Interest or dividend income -Realized gain or losses -Unrealized gain or losses	-Interest or dividend inc -Realized gains or losse (Unrealized gains or los reported in shareholders

Except for: *unrealized fo*
exchange gain or losses
AVS debt securities are
recognized in I/S under I

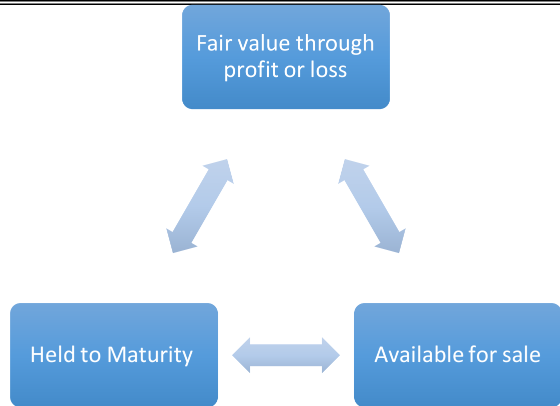
Example:
At the beginning of the year, Midland Corporation purchased a 9% bond with a face value of $100,000 for $96,209 to yield 10%. T coupon payments are made annually at year-end. Let's suppose the fair value of the bond at year-end. Let's suppose the fair value o bond at the end of the year is $98,500. Determine the impact under three kinds of financial assets.

	Held to maturity	Fair value through profit or loss	Available for sale
Carrying value	Coupon payment=9000 Interest income (reported in income statement) =96209x10%=9620.9 Amortized discount=620.9 Amortized cost=96209+620.9=96829.9	Fair value=98500 Unrealized gain=98500-96830=1670 reported in income statement	Fair value=98500 Unrealized gain reportec equity

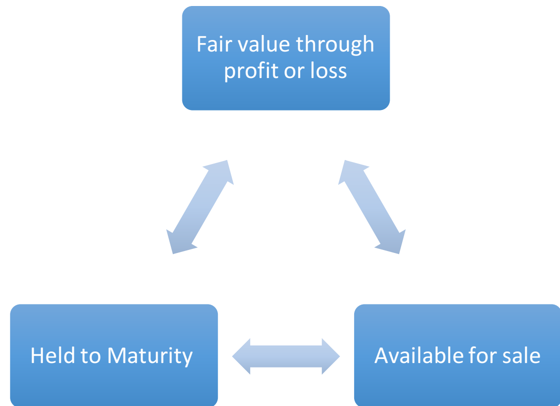
Now let's image that the bonds are called on the first day of the next year for $101,000. Calculate gain or loss in I/S

	Held to maturity	Fair value through profit or loss	Available for sale
Income Statement	101,000-96,830=4,170	Realized=101,000-98,500=2500	Realized gain=101000-96830=4170

3. Reclassification of investments in financial assets
IFRS



GAAP



4. Impairment of Financial Assets

IFRS and U.S. GAAP require that held to maturity (HTM) and available for sale (AFS) securities be evaluated for impairment at ea reporting period.

	GAAP		IFRS	
			Held to maturity	Available for Sale
Criteria	Decline in value is determined to be other than temporary		***Debt security:*** impaired if one or more events(loss events) occur tha have a reliably estimated impact on its future cash flow. Example: 1. The issuer experiences significant financial difficulty 2. Default or delinquency in interest or principal payments 3. The borrower encounters financial difficulty and receives a concession from the lender as a result	

		4. It becomes probable that the borrower will enter bankruptcy or otl financial reorganization Note: Downgrade of an entity's credit rating or a decline in fair valu a security below its cost or amortized cost is not evidence of impairment. Impairment loss can be ***reversed*** ***Equity securities:*** 1. Significant changes in the technological, market, economic, and le environments that adversely affect the investee and indicate that the initial cost of the equity investment may not be recovered 2. A significant or prolonged decline in the fair value of an equity investment below its cost equity impairment loss ***cannot be reversed***	
Impairment loss	Loss=fair value- cost, recognized in income statement. ***Cannot be reversed***	Difference between carrying value and present value of estimated future cash flows, the amount of loss is recognized in income statement	Cumulative loss in OCI is reclassified from equity to incor statement

5. IFRS 9 (New standards, effective date extended to 1 January 2018)

Current standard (IAS 39)	Held to maturity (debt securities)	Fair value through profit or loss (debt and equity securities)	Available for sale (debt anc equity securities)
New standard (IFRS 9)	Amortized Cost (debt securities)	Fair value through profit or loss (debt and equity securities)	Fair value through OCI (***eq securities only***)

Reclassification:
Reclassification of equity securities under the new standards is not permitted. (equity securities in FVPL or FVOCI is irrevocable)
Reclassification of debt securities is permitted only if the business model has changed.

Investments in Associates And Joint Ventures
Associates(equity method): 20%-50%, significant influence
Joint Ventures(mostly equity method): ventures undertaken and controlled by two or more parties

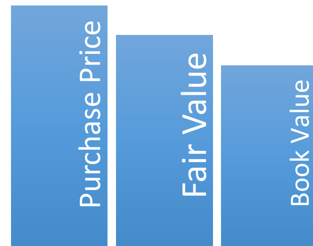
1. Equity method
$Equity\ investment = carried\ cost + share\ of\ post\ acquisition\ income - dividends\ received$
*Note: dividends received from investee are **not recognized** in investor's I/S*

Example:
Branch purchases a 20% interest in Williams for $200,000 on 1 January 2010. Williams reports income and dividends as follows:

	Income	Dividends
2010	**$200,000**	**$50,000**
2011	**300,000**	**100,000**
2012	**400,000**	**200,000**
	$900,000	**$350,000**

Equity investment (end of 2012)=200,000 + 20%x900,000-20%x350,000=$310,000

2. Excess of Purchase Price over Book Value acquired (Important!)



goodwill=purchase price – proportionate share of the investee's identifiable asset and liabilities based on **fair values**
Note: in subsequent periods, the investor recognized expense based on the excess amounts assigned to the investee's recognition of expense.

Example:
At the beginning of the year, Red Company purchased 30% of Blue company for $80,000. On the acquisition date, the book value of Blue's identifiable net assets was $200,000. Also, the fair value and book value fo Blue's assets and liabilities were the same except Blue's equipment, which had a book value of $25,000 and a fair value of $75,000 on the acquisition date. Blue's equipment is depreciated over ten years using the straight-line method.

At the end of the year, Blue reported net income of $100,000 and paid dividends of $60,000.

Calculate Goodwill?
Investment in associate at the end of the year?

Goodwill=purchase price – proportionate share of investee's identifiable net asset based on fair value = 80,000 – 30% x (200,000+75,000-25,000) =5000

Income: net income – additional depreciation of Blue's equipment = 30% x 100,000 – 30%x[(75,000-25,000)/10]=28,500

Investment balance at beginning of year $80,000
Income: 28,500
-Dividends (18,000)
Investment balance at the end of year 90,500

3. Impairment of investments in associates

	GAAP	***IFRS***
Criteria	Fair value of the investment falls below the carrying value, and decline is considered permanent	Evidenced by one or more loss events
Impairment Loss	Impairment loss=fair value – carrying amount Associate impairment loss ***cannot be reversed***	

4. Transactions with Associates

upstream transactions: investee to the investor
downstream: investor to investee
Both IFRS and GAAP require the ***unearned profits be eliminated*** to the extent of the investor's interest in the associate.

Example:
Jones Company owns 25% of Jason Company and applies the equity method. Amortization of excess purchase price, related to undervalued assets at the time of the investment, is €8,000 per year. During 2011 Jones sold €96,000 of inventory to Jason for €160 Jason resold €120,000 of this inventory during 2011. The remainder was sold in 2012. Jason reports income from its operations of €800,000 in 2011 and €820,000 in 2012.
1. Calculate the equity income to be reported as a line item on Jone's 2011 income statement
2. Calculate the equity income to be reported as a line item on Jone's 2012 income statement

1.
Jone's share of Jason's reported income: €200,000 €800,000x25%=€200,000
Amortization of excess purchase price: (8,000)
Unrealized profit: (4,000) (160,000-96,000)x[(160,000-120,000)/160,000]x25%=$4,000
Equity Income 2011 €188,000

2.

Jone's share of Jason's reported income:	€205,000
Amortization of excess purchase price:	(8,000)
Realized profit:	4,000
Equity income 2012	€201,000

€820,000x25%=€205,000

Business Combination

IFRS: not differentiated

GAAP:

Merger: acquiring firm absorbs all the assets and liabilities of the acquired firm, which ceases to exist (Lenovo, IBM PC)

Acquisition: both entities continue to exist in a parent-subsidiary relationship (Google, Youtube)

Consolidation: new entity is formed that absorbs both the combining companies (Kuaidi, Didi)

Historically, two accounting method used for business combination:

Purchase method: replaced by ***acquisition method***

Pooling of interest method (uniting of interests method): eliminated from GAAP and IFRS

1. Acquisition method

- All the Assets, liabilities, revenues, and expenses of the subsidiary are ***combined*** with the parent. Intercompany transactions are excluded.
- If parent owns less than 100% of the subsidiary, ***noncontrolling interest*** (minority interest) created.
- Initial recognition and subsequent accounting for ***goodwill***

Example:

On January 1, 2010, Company P acquires ***80%*** of the common stock of Company S by paying $8,000 in cash to the shareholders of Company S

Preacquisition Balance Sheet	***Company P***	***Company S***
Current assets	$48,000	$16,000
Other assets	32,000	8,000
Total	$80,000	$24,000
Current liabilities	$40,000	$14,000
Common stock	28,000	6,000
Retained earnings	12,000	4,000
Total	$80,000	$24,000

Preacquisition Income Statements	***Company P***	***Company S***
Revenue	$60,000	$20,000

Expenses	40,000	16,000
Net Income	$20,000	$4,000
Dividends paid		$1,000

Post-acquisition Balance Sheet	*Acquisition method*	*Equity method*
Current assets	$56,000	$40,000
Investment in S		8000
Other assets	40,000	32,000
Total	$96,000	$80,000
Current liabilities	$54,000	$40,000
Minority interest	2,000	
Common stock	28,000	28,000
Retained earnings	12,000	12,000
Total	$96,000	$80,000

Post-acquisition Income Statement	*Acquisition method*	*Equity method*
Revenue	$80,000	$60,000
Expenses	56,000	40,000
Operating income	24,000	20,000
Equity in income of S		3,200
Minority interest	(800)	
Net income	$23,200	$23,200

Goodwill:

Under US GAAP, goodwill is amount fair value of the subsidiary is greater than the fair value of the acquired company's identifiab assets. (full goodwill)

Under IFRS, goodwill is the excess of the purchase price over the fair value of the acquiring company's proportion of the acquired company's identifiable assets. (partial goodwill) Note: IFRS also permits use of full goodwill

Example:

A company paid $450 million for 75% of B company. Fair value of B net assets is 560. Calculate full goodwill and partial goodwill

Full goodwill: 450/75%-560=40

Partial goodwill: 450-75%x560=30

If full goodwill is used, noncontrolling interest is based on the acquired company's fair value.
partial goodwill is used, noncontrolling interest is based on the fair value of the acquired company's identifiable net assets.

Goodwill is tested for impairment at least annually. Impairment occurs when the carrying value exceeds the fair value.
IFRS:
Carrying amount of the cash generating unit exceeds the recoverable amount, an impairment loss is recognized.
GAAP:
First step: carrying value of the reporting unit exceeds the fair value of the reporting unit, an impairment exists
Second step: loss is measured as the difference between the carrying value of the goodwill and the implied fair value of the gooc

Example:
Last year, Parent Company acquired Sub Company for $1,000,000. On the date of acquisition, the fair value of Sub's net assets was
$800,000. Thus, Parent reported acquisition goodwill of $200,000 ($1,000,000 purchase price - $800,000 fair value of Sub's net ass

At the end of this year, the fair value of Sub is $950,000, and the fair value of Sub's net assets is $775,000. Assuming the carrying v
of Sub is $980,000, determine if an impairment exists and calculate the loss (if applicable) under GAAP and under IFRS.

Answer:
GAAP:
1. Since carrying value exceeds the fair value (980,000>950,000), an impairment exists
2. Implied value of goodwill=$950,000-$775,000=175,000; Carrying value of goodwill=200,000; An impairment loss is 25,00

IFRS: carrying value-fair value=30,000

Joint Ventures (Proportionate Consolidation)

Preacquisition Balance Sheet	***Company P***	***Company S***
Current assets	$48,000	$16,000
Other assets	32,000	8,000
Total	$80,000	$24,000
Current liabilities	$40,000	$14,000
Common stock	28,000	6,000
Retained earnings	12,000	4,000
Total	$80,000	$24,000

Preacquisition Income Statements	***Company P***	***Company S***

Revenue	$60,000	$20,000
Expenses	40,000	16,000
Net Income	$20,000	$4,000
Dividends paid		$1,000

Assume that Company P acquired 80% of Company S on January 1, 2010 for $8,000 cash.

Post-acquisition Balance Sheet	*Acquisition method*	*Proportionate Consolidation*	*Equity method*
Current assets	$56,000	$528,00	$40,000
Investment in S			8000
Other assets	40,000	38,400	32,000
Total	$96,000	91,200	$80,000
Current liabilities	$54,000	51,200	$40,000
Minority interest	2,000		
Common stock	28,000	28,000	28,000
Retained earnings	12,000	12,000	12,000
Total	$96,000	91,200	$80,000

Post-acquisition Income Statement	*Acquisition method*	*Proportionate Consolidation*	*Equity method*
Revenue	$80,000	76,000	$60,000
Expenses	56,000	52,800	40,000
Operating income	24,000	23,200	20,000
Equity in income of S			3,200
Minority interest	(800)		
Net income	$23,200	$23,200	$23,200

	Acquisition Method	**Proportionate Consolidation**	**Equity**
Net Income	Same	Same	Same
Equity	Higher	Same	Same
Net Profit Margin	Lower	In between	Higher
ROE	Lower	Same	Same
ROA	Lower	In between	Higher

Special Purpose and Variable Interest Entities

Special purpose entities (SPEs): enterprises created to accommodate specific needs of the sponsoring entity. The sponsoring entity frequently transfers assets to the SPE, obtains the right to use assets held by SPE, or performs services to the SPE, while other parti (capital providers) provide funding to the SPE.

In most cases, the creator/sponsor of the entity retains a significant beneficial interest in the SPE even though it may own little or n the SPE's voting equity. Avoid consolidating SPEs on their financial statements because they did not have "control"

Variable interest entity (VIE): under GAAP, VIE includes other entities besides SPEs. ***VIE requires consolidation.***

VIE is an entity that has one or both of the following characteristics:

1. At-risk equity that is insufficient to finance the entity's activities without additional financial support
2. Equity investors that lack any one of the following:
   - Decision making rights
   - The obligation to absorb expected losses
   - The right to receive expected residual returns

Example:

Company P, a textile manufacturer, wants to borrow $100 million. It has two options:

Option A: Borrow $100 million from Bank B

Option B: Sell $100 million worth of accounts receivable to Company S, an SPE created for this purpose. The SPE will fund th purchase by borrowing the money from Bank B.

Company P's balance sheet before the borrowing is provided below:

Assets	***$millions***	***Liabilities and Equity***	***$ millions***
Cash	$50	Current liabilities	$500
Accounts receivable	$200	Debt	$1200
Fixed assets	$2000	Equity	$550
Total assets	$2250	Total	$2250

Option A:

Assets	***$millions***	***Liabilities and Equity***	***$ millions***
Cash	$150	Current liabilities	$500
Accounts receivable	$200	Debt	$1300
Fixed assets	$2000	Equity	$550
Total assets	$2350	Total	$2350

Option B:

Assets	***$millions***	***Liabilities and Equity***	***$ millions***
Cash	$150	Current liabilities	$500

Accounts receivable	$100	Debt	$1200
Fixed assets	$2000	Equity	$550
Total assets	$2250	Total	$2250

SPE:

Assets	***$millions***	***Liabilities and Equity***	***$ millions***
Accounts receivable	$100	Debt	$100
Total assets	$100	Total	$100

After consolidation:

Assets	***$millions***	***Liabilities and Equity***	***$ millions***
Cash	$150	Current liabilities	$500
Accounts receivable	$200	Debt	$1300
Fixed assets	$2000	Equity	$550
Total assets	$2350	Total	$2350