

Associates and joint ventures

- **Associates**
- **associate is an enterprise over which the parent company**
 - has a participating interest and exercises significant influence
 - and is not a subsidiary, nor a joint venture
- **in UK, rebuttable presumption that 20% is participating**
- **accounting through the equity method**
 - investment at cost + share of associate's results
 - associate's results included as a separate item in P&L

- **example of equity method**
- **often called "one line consolidation"**
- **investment cost 100, share of profits this year=7**

Balance sheet at 20X1

<u>Assets</u>		<u>Liabilities</u>	
Bank	-100		
Investment	+100+7	Reserves	
		P&L	+7

- **share of profits added to P&L(as separate item) and investment**
- **the investment should include any goodwill (to be shown separately)**
 - of course, investment will be reduced as the goodwill is written off to the P&L

Joint ventures

- **joint venture is a loose term**
- **IAS 31, includes**
 - jointly controlled operations
 - jointly controlled assets
 - jointly controlled entities
- **FRS9, includes only**
 - jointly controlled entities
- **joint control normally means that each party needs to agree about strategic matters**
- **the accounting treatment in FRS9 and IAS31 is similar, despite the different definitions of joint venture**

FRS9 terms	IAS31 terms	Treatment
venture	entity	IAS31 benchmark treatment is % consolidation, but allows equity method of FRS9
arrangement	Operations, assets	recognise directly in the accounts in both FRS9 and IAS31

- **Gross equity method of FRS9**
- **company has 20% share of original 800 assets and 300 liabilities, this year's profits = 35**

Balance sheet at 20X1

<u>Assets</u>		<u>Liabilities</u>	
Bank	-100		
Investment: share of assets	+167		
Share of liab	-60		
		P&L	+7

- **Proportional consolidation of ISA31**
- **as in consolidation, replace investment with share of underlying assets and liabilities**
- **includes JV revenue/costs with parent**
- **but include only the % of assets**
 - replace 167 with the % underlying assets
 - replace 60 with the % underlying liabilities
- **hence, no minority interests**
- **problem is that now over some assets have control (own+subsidiaries) and others only joint control (joint ventures)**
 - all mixed up

- **Graham, King & Morrill, Accounting Horizons, June 2003, "Decision usefulness of alternative JV reporting methods"**

FIGURE 1
Proportionate Consolidation versus the Equity Method: A Numerical Example

Partner Limited owns 40 percent of JV Incorporated. Key year-end balance sheet and income statement figures appear below. Assume that book values approximate market value and that Partner's figures do not include any JV results.

	<u>Partner</u>	<u>JV</u>
<i>Balance sheet</i>		
Assets (other than investments)	\$100	\$30
Liabilities	50	20
<i>Income statement</i>		
Revenues	\$60	\$20
Expenses	40	15

Partner's year-end balance sheet and income statement, under proportionate consolidation and under the equity method, would appear as follows:

PROPORTIONATE CONSOLIDATION		EQUITY METHOD	
Partner Ltd.: Balance Sheet		Partner Ltd.: Balance Sheet	
Assets [100 + (40% × 30)]	<u>\$112</u>	Other assets	\$100
		Investment in JV [40% × (30 – 20)]	<u>4</u>
Total assets	<u>\$112</u>	Total assets	<u>\$104</u>
Liabilities [50 + (40% × 20)]	58	Liabilities	50
Shareholders' equity	<u>54</u>	Shareholders' equity	<u>54</u>
Liabilities plus shareholders' equity	<u><u>\$112</u></u>	Liabilities plus shareholders' equity	<u><u>\$104</u></u>
Partner Ltd.: Income Statement		Partner Ltd.: Income Statement	
Revenues [60 + (40% × 20)]	\$68	Revenues	\$60
Expenses [40 + (40% × 15)]	<u>46</u>	Expenses	40
		Share of JV income [40% × (20 – 15)]	<u>2</u>
Net income	<u><u>\$22</u></u>	Net income	<u><u>\$22</u></u>
Key financial ratios		Key financial ratios	
Return on Common Equity (\$22/\$54)	0.41	Return on Common Equity (\$22/\$54)	0.41
Profit Margin (\$22/\$68)	0.32	Profit Margin (\$22/\$60)	0.37
Total Assets Turnover (\$68/\$112)	0.61	Total Assets Turnover (\$60/\$104)	0.58
Leverage (\$112/\$54)	2.07	Leverage (\$104/\$54)	1.93

Financial ratio formulae:

Return on Common Equity	=	Net Income/Shareholders' Equity;
Profit Margin	=	Net Income/Revenue;
Total Assets Turnover	=	Revenue/Assets; and
Leverage	=	Assets/Shareholders' Equity.

- **equity method used in US, UK, Australia, New Zealand**
- **proportional consolidation used in Canada, IAS and continental EU countries**
- **Data**
 - 78 Canadian companies reporting on joint ventures during 1995-2001
- **they calculated equity method from proportional consolidation figures**

- **RCE=return on common equity=NI/SE**
 - NI= net income
 - SE=shareholders' equity
- **note that RCE is same under both methods, equity method (EQ) and proportionate consolidation (PC)**
 - in the example, $\$22/\$54=0.41$
- **RCE=NI/Sales * Sales/Assets * Assets/SE**
RCE=
profit margin * asset turnover *leverage
PM * AT *Lev
- **these component ratios differ with EQ and PC**
- **basic idea is to use EQ and PC component ratios to predict the future RCE**
- **they use PM, AT and Lev from both EQ and PC to predict one period ahead RCE**
- **they compare the R² of the different models**

- the key results

R^2 of different models to predict RCE_{t+1}

	RCE_t only	RCE_t, PM, AT and Lev
Equity method ratios	0.12	0.16
Prop consol ratios	0.12	0.22
Both EQ and PC ratios		0.23

- both EQ (0.16) and PC (0.22) ratios are significantly better than RCE_t (0.12)
- EQ and PC combined (0.23) is no better than PC (0.22)
- EQ and PC combined (0.23) is better than EQ (0.16)
- but not clear what ratio is doing the work