FN 201 BUSINESS FINANCE

Lecture 5

Financial Statement Analysis (1)

- Agenda
  - Why Ratio?
  - What do we look in financial ratio?
  - Profitability ratio
  - Q & A

What and Why Financial Ratio?

- Financial ratio
  - Relationship between two or more fin number from accounting statement, i.e., balance sheet, income statement, cash flow statement

- Why ratio?
  - Absolute numbers are difficult to compare, sometimes does not make sense
  - It is comparable since it is based on the same denominator

Interpretation

- Figure per one unit of denominator

Who look at firm's financial report?

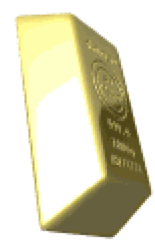
- Financial Managers
  - Monitor firm value through time or in comparison to main competitors
  - Compare profit, efficiency, solvency, liquidity, cost management etc.
- Regulators
  - Ensure that report fairly and accurately represents financial status of the firms
- Stocks Investors
  - To make money, one must buy low and sell high
  - Buy under-valued firm and sell over-valued firm

Fundamental analysis

- A method of evaluating intrinsic value of a security that by examining related economic, financial and other qualitative and quantitative factors
- Goal is to produce a value that an investor can compare with the security's current price, with the aim of figuring out what sort of position to take with that security (underpriced = buy, overpriced = sell or short)
- Considered to be the opposite of technical analysis
- One of the most famous and successful fundamental analysts is Warren Buffett, who is well known for successfully employing fundamental analysis to pick securities

Intrinsic Value

- Buy undervalued / underpriced
- Sell overvalued / overpriced



Benefits and Limitation of Financial Ratio Analysis

- **Benefits:**
  - Enable comparisons across firms, industry and times
  - Able to convey information in many dimensions
    - Profit
    - Efficiency in production, use of assets
    - Cost management
    - Balance sheet structure
    - Liquidity
  - Enable financial managers to ask the right questions!!!

- **Limitations:**
  - Provide only one point-in-time snapshot
  - Lagging accounting information
  - History not necessary a good reflection of future operation
  - Affected by choice of accounting method
  - Difficult to interpret when negative
  - Be cautious when compare across firms
  - Can be manipulated to certain extent

Financial Reports

- 1) Balance Sheet
- 2) Profit and Loss or Income Statement
- 3) Statement of Cash flow

Balance Sheet Structure

Asset	Liability
➢ Current asset	➢ Current liability
▪ cash, A/R, inventory	▪ overdraft (O/D)
▪ marketable securities	▪ short term loan
➢ Long-term asset	➢ Long-term liability
▪ land, machinery	▪ long-term loan
▪ factory, fixed asset	**Equity**
	▪ common stocks
	▪ retained profits

For the Year Ended 31 December 2010

(Baht Million)

Net Cash Inflows from Operating Activities		2,540
Net Cash Payment for Investing Activities	(1)	(4,753)
Net Cash Receipts from Financing Activities	(2)	2,413
Net Increase in Cash & Cash Equivalents		200
Loss on exchange on Cash & Cash Equivalents		(15)
Cash & Cash Equivalents on 31 December 2009		969
Cash & Cash Equivalents on 31 December 2010		1,154

Consolidated Balance Sheets

As at 31 December 2009

(Baht Million)

Assets	
Cash & Cash Equivalents	969
Other Current Assets	3,895
Investments & Other	9,343
Property Plant and Equipment	14,064
Total Assets	28,271
Liabilities & Equity	
Current Liabilities	6,677
Non-current Liabilities	9,539
Share Capital, Premium & Reserves	5,866
Retained Earnings - net	5,287
Minority Interest	902
Total Liabilities & Equity	28,271

Consolidated Statement of Income

For the Year Ended 31 December 2010

(Baht Million)

Revenues	18,873
Gross Operating Profit	11,169
S&A Expenses	9,319
Operating profit	1,850
Profit sharing	216
Earnings Before Financial Costs and Tax	2,066
Financial Costs	458
Earnings Before Tax	1,608
Corporate Tax	291
Minority Interest	76
Net Profit	1,241

Consolidated Balance Sheets

As at 31 December 2010

(Baht Million)

Assets		
Cash & Cash Equivalents		1,154
Other Current Assets	(4)	5,693
Investments & Other	(5)	10,813
Property Plant and Equipment	(6)	15,126
Total Assets		32,786
Liabilities & Equity		
Current Liabilities		6,059
Non-current Liabilities	(7)	12,922
Share Capital, Premium & Reserves	(8)	6,903
Retained Earnings - net		6,020
Minority Interest		882
Total Liabilities & Equity		32,786

Retained Earnings

As at 31 December 2010

(Baht Million)

Balance as at 31 December 2009		5,287
Specific capital reduction		(20)
Total Earnings for 2010		1,241
Dividends	(3)	(488)
Balance as at end 31 December 2010		6,020

Aspects of analysis

- Profitability
  - Profitability: Ability to earn profit
  - Will firm survive in long run?
- Efficiency / Activity
  - Efficiency: How well does the firm use its resource in production and running the business
- Leverage
  - Leverage: How much debt the firm has?
  - Solvency: Ability of firms to pay its (long-term) debts with available cash, or ability of a firm to meet its long-term fixed expenses and to accomplish long-term expansion and growth
- Liquidity
  - Liquidity: Ability to meet its (short-term) payment obligations
- Marketable Ratio

My advices on financial ratios analysis

- There are tons of financial ratios
- Different industry has different "key" ratios and benchmarks
- Need to really understand the business to make the most out of the analysis
- Financial ratio analysis is just a starting point

Stock of the Decade

ธุรกิจ : CEO Blogs

วันที่ 16 สิงหาคม 2554 04:00

ดร.นิเวศน์ เหมวชิรวรากร

โลกในมุมมองของ VALUE INVESTOR

จำนวนคนอ่าน 803 คน

- Apple vs Exxon

	Apple	Exxon	Notes
Market Cap	350 billion USD	350 billion USD	About 10 trillion THB, annual GDP of Thailand SET market cap is about 8.7 trillion THB
Asset size	100 billion USD • 3 trillion THB • cash 0.8 trillion • Asset generating return 2.2 trillion	300 billion USD • 9 trillion THB • cash 0.3 trillion • Asset generating return 8.7 trillion	Exxon is 3 times bigger than apple Exxon has employed assets generating return about 4 times of apple
	Is too much cash a good thing?		
Debt	0	0.5 trillion THB	
Sale	100 billion USD	400 billion USD	Exxon has sales revenue 4 times of Apple Annual sales of Exxon is more than Thailand annual GDP
	Is Apple share over valued?		

Stock of the Decade (2)

	Apple	Exxon	Notes
Net profit @10	23.6 billion USD	37.9 billion USD	Who has higher profitability? Apple net profit margin is 24% Exxon net profit margin is 10%
ROE	42%	25%	ROE = net profit / equity Apple figure not include huge cash in business 25% for Exxon is already an excellent figure
Net profit growth Q-o-Q	125%	41%	Exxon is already a star but Apple is "super-star"
P/E	14.8	9.5	P/E = Market price per share / Earning Per Share (EPS)
P/BV	4.9	2.2	P/BV = Market Price per share / book value per share (BVPS)
	What do you think about "value" of these stocks?		

Stock of the Decade (3)

	Apple	Exxon	Notes
Price movement			
2003 2008 Crisis 2010	7 187 (+25.7x) 80 (-57.2%) 374 (+367%)	34 95 (+2.79x) 62 (-34.7%) 72 (+16%)	
	What can you say about price volatility of these stocks?		

Example: CP All Public Company Limited

Example: CP All Public Company Limited

ข้อมูลนักลงทุน

• ข้อมูลทางการเงิน • ข้อมูลสำหรับผู้ถือหุ้น • รายงานประจำปี • หลักธรรมาภิบาล

FINANCIAL HIGHLIGHTS: Yearly Consolidated Data

	2006	2007	2008	2009
Income Statement (Million Baht)				
Net sales	96,670	107,757	121,026	109,430
Total revenue	103,276	115,358	129,454	17,761
Cost of sales	77,014	85,215	93,285	81,618
Total cost & expenses	103,367	115,257	125,455	110,971
EBIT	(91)	101	4,000	6,790
Net profit	1,332	1,460	3,301	4,992
EBITDA	2,544	2,831	6,689	9,229
Balance Sheet (Million Baht)				
Total assets	42,970	45,220	40,159	44,441
Total liabilities	34,934	39,589	23,259	25,505
Total equity	8,036	5,631	16,900	18,937

Key Financial Ratios

Operation				
Gross margin (Sale and Services)	21.6%	22.1%	24.0%	26.4%
EBITDA margin	2.5%	2.5%	5.2%	7.8%
Profitability				
ROAA	3.2%	3.3%	7.7%	11.8%
ROAE (excl. MI)	15.2%	16.3%	25.5%	28.1%
Net profit growth	-11.7%	9.6%	126.1%	51.2%
Financial				
Dividend payout ratio	84%	107%	82%	72%
Inventory day	36.9	32.5	25.4	25.0
Per Share (Baht)				
Earning per share	0.30	0.33	0.74	1.11
Book value per share (excl. MI)	2.0	2.1	3.7	4.2

Profitability

Profitability

- Net profit and net profit growth
- Margin
- PE ratio , Earning per share
- ROA, ROE

EBIT & EBITDA & EBIAT & FCF

Sale — COGS — Operating Expense - Depreciation Expense	Earning Before Interest and Tax	EBIT
EBIT + Depreciation	Earning Before Interest, Tax, Depreciation and Amortization	EBITDA
EBIT – tax	Earning Before Interest After Tax	EBIAT
EBIAT (+) Depreciation (-) Investment or Capital Expenditure (-) Required Investments in Net Working Capital	EBIAT +/- Adjustment	FCF

Earning and Cash flow

Many Types of Margins

- Start : Sale
- Less : Cost of Goods Sold (Adj.)
- Equals : Gross Profit -> 1.1) Gross profit margin (%)
- Less : Admin. Cost
- Less : Depreciation / Amortization Expense
- Equals : Operating Profit (EBIT) -> 1.2) Operation profit margin (%) Less : Interest Expense
- Equals : Pre-tax Profit -> 1.3) Pre-tax margin (%)
- Less : Tax
- Equals : Net Profit -> 1.3) Net profit margin (%)

P/E and PEG and P/BV(1)

- Price-earning ratio P/E
  - Market Price per share/ Earning Per Share
  - Backward and Forward P/E
- Price-book value P/BV
  - Market Price per share / book value per share (BVPS)

- Use by analyst to indicate
  - Target price of particular stock
  - Sort of "relative" value of the stock

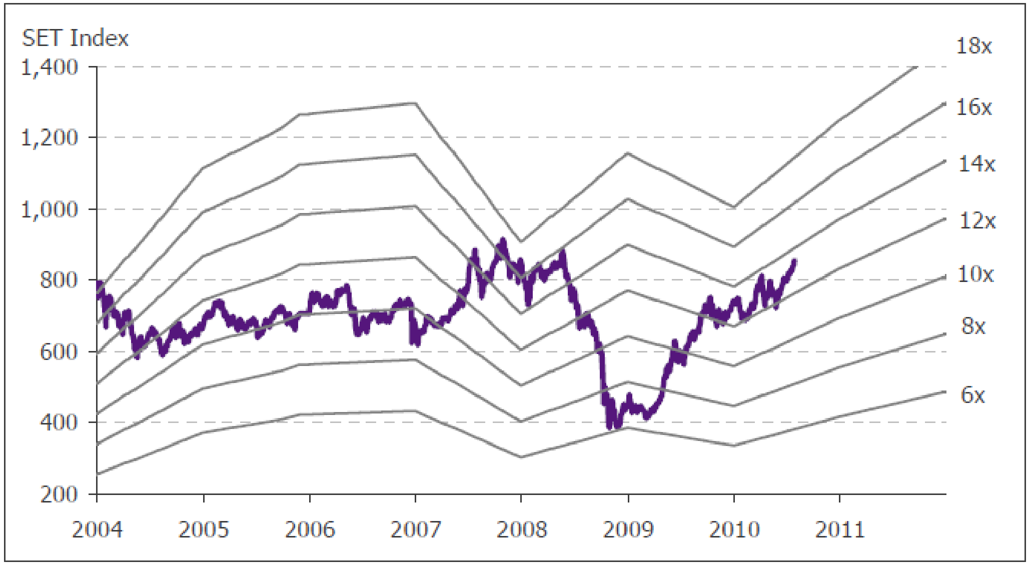
P/E and PEG and P/BV (2)

- PE = 8 means
  - You have paid 8 times over its earning
  - Will take about 8 years to break even / expected return of 1/8 = 16.67%
- What about those with PE = 35x?
  - It is on the run, high demand by investors
  - Investor expects company to have significant growth in the future
    -> high expectation

SCBS Investment Recommendations

Company	Rec.	Risk Rating*	12-mth Target Price	Implied Target PER 10 / 11	Price (Bt)
CPN	Sell	M	20.00	23x / 18x	28.25
LH	Buy	M	7.80	20x / 16x	6.05
LPN	Neutral	M	9.30	10x / 9x	9.35
PS	Buy	M	29.00	15x / 12x	23.70
QH	Buy	M	3.14	12x / 11x	2.36
SIRI	Neutral	H	5.94	6x / 5x	5.70
Transportation					
AOT	Buy	M	47.00	34x / 23x	39.00
BECL	Sell	M	17.80	8x / 11x	18.70
PSL	Buy	H	21.80	47x / 26x	18.50
RCL	Buy	H	20.00	250x / 20x	15.00
TTA	Buy	H	29.40	39x / 21x	24.20
THAI	Buy	H	48.00	12x / 8x	40.00

SET Consensus EPS PE Band



The SET Index PE has now almost hit 14x

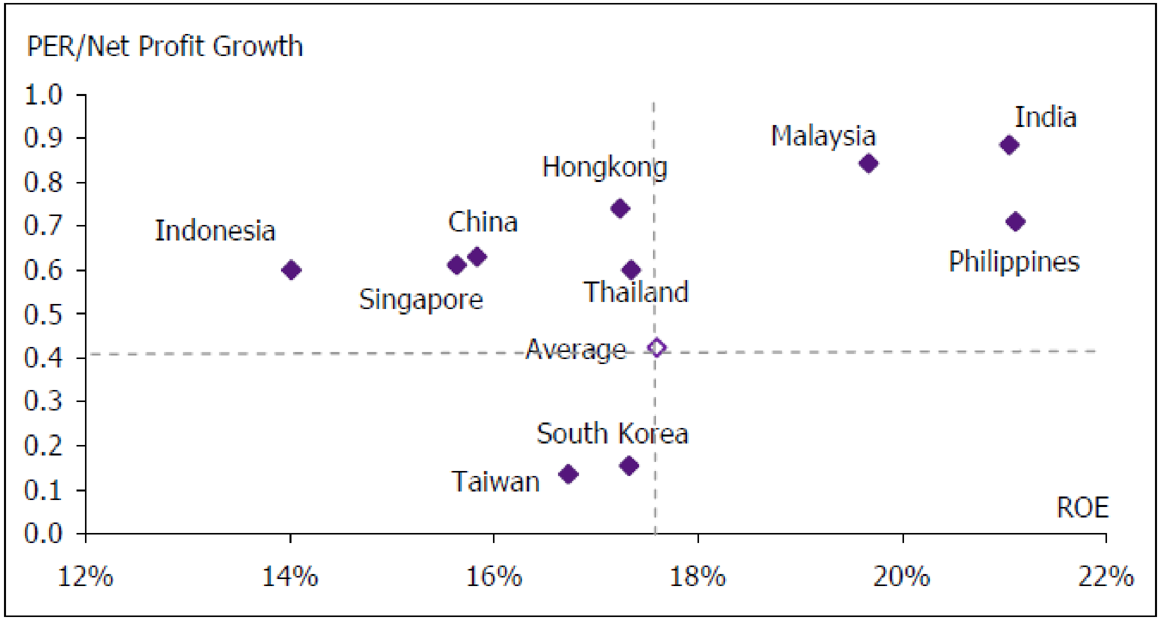
Source: SCBS Investment Research, SET, Bloomberg

P/E and PEG and P/BV (2)

- PEG is price earning to growth ratio
  - Indicate trade off between price to earning and growth
  - Fairly valued company will have its PEG equal to 1 (If a company is growing at 30% a year, and has a P/E of 30, it would have a PEG of 1)
  - High PE must be compensated by high potential growth
  - A lower ratio is "better" (cheaper) and a higher ratio is "worse" (expensive)
  - It explicitly puts a value on the expected growth in earnings of a company

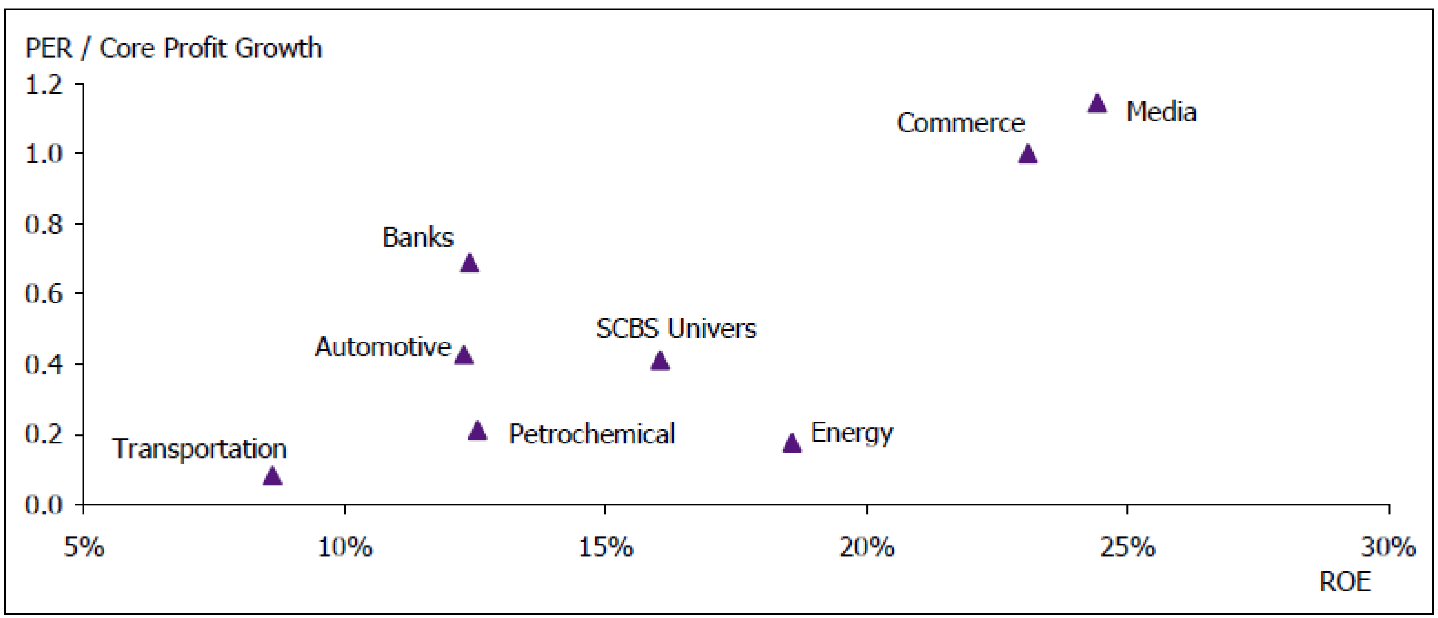
- P/BV indicates market price over historical or book value
  - P/BV of 3 means you pay three times over price paid by original owner -> you willing to buy this firm at 3 times of it book value
- P/E and P/BV used as a quick scan by the analysts

2010 Consensus regional valuation map



Source:Bloomberg

SCBS 2010 sector valuation map



Source: SCBS Investment Research

Q&A