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How analysts use corporate information

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June 2003

This presentation….

How analysts use corporate information

- General overview of an analyst's role
- Adjustments made to financial statements
- Techniques used by analysts
  - multiples
  - DCF
- Specific areas of concern
  - Pensions
  - Stock options
  - Revenue recognition
  - Goodwill

Equity analysis…...

… attempts to determine the most appropriate value of a company

This value is then compared to the current value:

Analysts:
buy/sell recommendations

Investors:
buy/sell
specific stocks

General overview of an analyst’s role

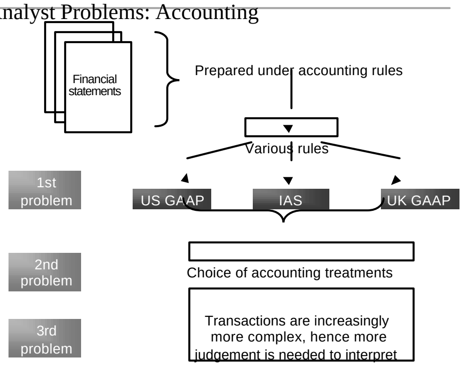
- Aim is to make recommendations on whether to buy or sell the stock
- Normally one year price target is set
- Depending on how this price target compares to current share price, this determines the recommendation (buy, neutral, reduce)
- Recommendation should be updated regularly when factors change

General overview of an analyst’s role (cont’d)

How do they do it?

- Use historical financial statements, management meetings, press releases, general sector information, competitor news, economic factors, political considerations, etc
- Past information helps analysts predict the future
  - historical information forms the basis of forecasts
- Need to understand accounting policies and how these differ globally
  - different policies result in differences in multiples: either an adjustment needs to be made or an appropriate multiple chosen

Analyst Problems: Accounting



Example: Leasing

Two types of accounting for leases:

- Finance (or capital) lease
  - both asset and debt obligation on balance sheet
  - cash payment split between capital repayment and interest charge
  - earnings hit by depreciation and interest charge
- Operating lease
  - nothing on balance sheet
  - cash payments charged to earnings annually

If two companies adopt different accounting treatments for the same asset, then both the income statement (EBIT, EBITDA and earnings) and the balance sheet are different.

Analyst solutions

Various techniques can be used to reduce (but not fully eliminate) accounting differences

Restate accounting data

Make certain specific adjustments

Use statistics less affected

Example: Associates and JV's

Associates/JV's can be disclosed in various ways in the income statement:

- One figure
  - can be above EBIT
  - can be below EBIT
- Various figures
  - can be broken down from revenue line all way down to earnings
  - can be broken down from EBIT down to earnings (UK approach to associates)

Bottom line earnings will be comparable but measures above that may not be (ie EBIT). Amendments need to be made to ensure like-for-like comparisons are feasible.

UBS Warburg adopts a 'CORE' approach:associates/JV's tend to be treated as non-core

Additional analyst considerations…..

Creative accounting

Manipulation of figures

- Normally, want to increase/smooth earnings
- Normally, want to reduce liabilities

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Adjustments made to financial statements

- Companies report GAAP figures
- PLUS they may also give pro forma figures
- Analysts calculate their own pro forma figure

- UBSW: all adjusted figures exclude goodwill amortisation/impairment and items which are deemed non-recurring by the analyst
  - ie restructuring charges, gains/losses on asset disposals, derivative gains/losses, impairments, large one-off items (ie stock provisions etc)

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Techniques used by analysts

Valuation multiple based techniques	Equity or enterprise value based Relative values only Too simplistic ??
Discounted cash flow based techniques	Discounting of equity or enterprise cash flows Many variations .. EVA*, CFROI Do they work ??

*EVA is a registered trade mark of Stern Stewert & Co.

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Valuation Multiples: What are they?

- Nothing more than an expression of market value relative to a key statistic which is assumed to relate to that value
- A stock's multiple simply reflects the market's interpretation of value

Many 'key statistics' could be used as a basis for multiples ...

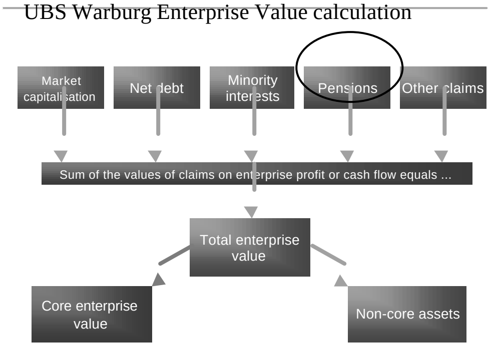
Profit measures | Dividends | Cash flow

Assets | Business activity

Types of multiples

- **Enterprise multiples**
  - EV:EBIT, EV:EBITDA, EV: Revenue, EV:OpFCF etc
  - looks at the whole enterprise (ie, all providers of finance)
  - UBSW preferred
- **Equity multiples**
  - P:E, P:BV, PEG
  - focuses solely on the equity investor

UBS Warburg Enterprise Value calculation



DCF

A company's cash flows are forecast into the future and discounted back using the company's cost of capital in order to obtain an absolute value today

Value = present value of expected future cash flows

$$\text{Value} = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

- r = The investor required return or cost of capital
- CF_n = The expected cash flow available for investors in year n

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Free cash flow - standard calculation

EBIT (normal operating profit)	X
Taxes on normal operating profit	(X)

NOPLAT (normal operating profit less adjusted taxes)	X
Depreciation and amortisation	X

Gross cash flow	X
Capital expenditure	(X)
Change in working capital	(X)/X
Non-cash changes in operating provisions	(X)/X

Enterprise free cash flow	X
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Specific areas of concern

- Pensions
- Stock options
- Revenue
- Goodwill (and business combinations)
- Off balance sheet items
- Financial Instruments
- Leasing
- Provisioning
- Depreciation
- Taxation, and more…….

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Pensions: DB schemes

- Very topical at moment as funded schemes show large deficits
- Accounting very complex, and different countries use different rules
- UK's FRS 17 probably best existing standard

What do analysts do?

- Need to break out income statement charge and clean up the balance sheet
- Include net deficit as a source of finance

Defined Benefits – financial statement effects

- Income statement charge is generally made up as follows:

  Service cost
  + Interest cost (unwinding of the discount)
  - Expected return on assets
  +/- Recognised actuarial gains/losses (spread forward)
  +/- Recognised past service costs (spread forward*)
  +/- Other items
  = Total pension charge / credit**

  * May be recognised when vested
  ** This is normally shown within EBIT but can be split (eg UK FRS 17)

- The balance sheet net pension item reflects:

  Pension plan assets (at market value)
  Less Pension obligations (discounted)
  = Net surplus / (deficit)
  +/- unrecognised actuarial gain/loss
  +/- unrecognised past service cost
  +/- other items
  = Net balance sheet asset / liability

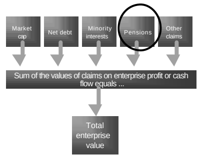
Pensions and performance measures

(simple) Income Statement		
Revenue	x	
Cost of sales	(x)	Should include only pension service cost
Selling, General & Admin costs	(x)	
Earnings before Interest and Tax (EBIT)	x/(x)	Should include pension financing cost*
Interest	x/(x)	
Tax	(x)	
Earnings	x/(x)	

*as amended as appropriate

Pensions as a source of finance

Net deficit should be included as a source of finance in Enterprise Value, net of tax if applicable



The 'cost' of that finance should be included in earnings (but not in EBIT)

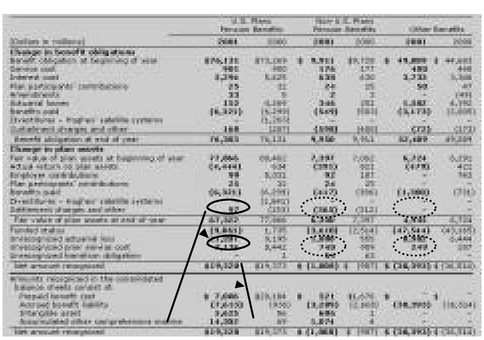
Finance cost:	
Expected return (decided by company)	x
Interest cost (company's discount rate)	(x)

We would prefer this to be based on the discount rate

Example: FRS 17 and Rolls Royce

£m		2002			2003E	
	Reported SSAP 24	Restated FRS 17	Restated FRS 17 excl. equityreturn	Reported SSAP 24	Restated FRS 17	Restated FRS 17 excl. equityreturn
Operating profit	**220**	**211**	**211**	**236**	**254**	**254**
Goodwill amortisation	-52	-52	-52	-52	-52	-52
Exceptional items	-22	-22	-22	0	0	0
Joint venture income	66	66	66	70	70	70
Net interest	-107	-107	-107	-124	-124	-124
Expectedreturnonpensionsassets	-	355	284	-	272	217
Pensionsinterestexpense	-	-316	-316	-	-321	-321
Pre-tax profit	105	135	64	130	99	44
Taxation	-52	-61	-40	-55	-46	-29
Earnings for equity investors	53	74	24	75	53	15
Reported EPS (p)	3.3	4.6	1.5	4.7	3.3	0.9
Adj 'd earnings pre gII& exceptionas	127	148	98	127	105	67
Adjusted EPS (p)	**7.9**	**9.2**	**6.1**	**7.9**	**6.5**	**4.1**
P/E (adjusted earnings)	**12.2x**	**10.4x**	**15.7x**	**12.2x**	**14.7x**	**23.1x**

Example: Pensions at General Motors (2001)



This is true b/s deficit

This is b/s amount

Source: General Motors 2001

Pensions summary

- EV: add net deficit, deduct net surplus (less applicable tax)
- EBIT: include only service cost
- Earnings: include service cost and an element of finance
- DCF: treat service cost as a proxy for cash in the long term

Employee stock options

What are they?

- The right to purchase shares at a fixed price at some point in the future

Performance period

time

Option granted	Vesting date	Options exercised
Some conditional options are granted, exercisable in a future period	Option holder has unconditional rights over the options, and can exercise them within a stated future period	When options are exercised, the holder pays the exercise price and gets shares in return

Are stock options a cost?

Many people seem to think not …

- It's already dealt with in the diluted eps
- Only 'cost' is the potential future dilution
- No cash flow therefore no cost
- 'Cost' to shareholders and not the company

We disagree - the grant of options is a cost that must be recognised in order to have fair measurement of performance

A recap on option accounting

United States:

- FAS 123 adopts a fair value approach but makes recognition of an expense optional
- Alternative is to recognise intrinsic value only under rules of APB 25 - but this is usually zero
- FV disclosures are required even if intrinsic value used for charge

Other countries:

- Little regulation - at best recognition of intrinsic value but generally few disclosures
- IASB (and UK will follow) are planning to require mandatory expensing by year end

Option accounting is controversial

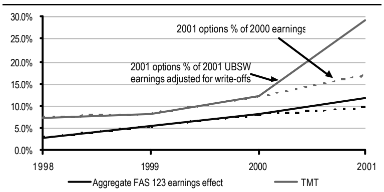
Several very difficult questions ….

- Is there a cost?
- Should this be measured at fair value or intrinsic value?
- Is an pricing model such as Black-Scholes the best approach to measuring the options expense? Is it reliable?
- When should the cost be measured - grant date or vesting date?
- How should subsequent changes in option value be dealt with?
- Does the diluted eps capture the full impact of options on the company and shareholders?

Option costs are material

Impact of recognising options costs on US company profits ...

Chart 1: Reduction in earnings due to FAS 123 proforma stock option adjustments



Source: UBS Warburg

Option summary

- EV: fair value of existing options treated as a source of finance
- EBIT: option costs should be included at fair value, spread over vesting period
- Earnings: as per EBIT
- EPS: need to include both the expense in earnings and the dilution in the number of shares (not a ‘double whammy’)
- DCF: treat earnings charge as a proxy for cash in the long term

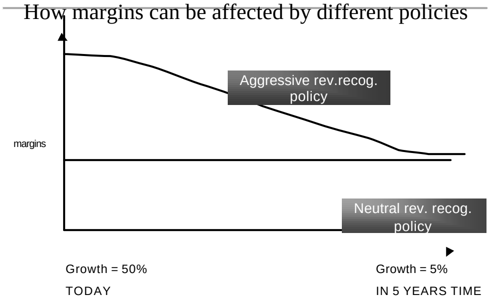
Revenue Recognition

Main risk: too much revenue too soon is reported

Issues:

- timing of revenues
  - are revenues being recognised too early?
  - are sales around year end being smoothed?
  - is contracted income being recognised up front?
  - what are the policies of other companies in sector?
- amount of revenues
  - did the company make all the recognised sales? (risk and reward concept)
  - are sales returns being netted off sales or included as an expense?
  - what happens to incentives?

How margins can be affected by different policies



Analysts need to understand the effect of the chosen policy on historic and future revenues and margins

Goodwill: does it confuse financial markets?

ING to Record Loss for 2002 Under U.S. Accounting Rules

Just weeks after it posted a €4.3 billion ($4.57 billion) profit for 2002, Dutch insurer ING Groep NV shocked markets by saying that the result had turned into a €9.6 billion loss when the company reported under U.S. accounting rules.

But the company's stock, after initial weakness, rallied Monday in Amsterdam and New York.

The reversal is the latest example of a European company that has moved into the red as a result of differences between European and U.S. accounting systems. Other examples have included Spain's Telefonica SA and France Telecom SA.

Shares in ING, one of Europe's top 20 financial institutions in terms of assets, fell 5.2% initially to €11.10 in Amsterdam, after the company reported the loss under U.S. rules. But the stock later bounced back to close at €12.65, up 8.1%, as investors realized the loss was related to divergent accounting standards, rather than a deterioration in operations or any questionable activity.

Source: Wall Street Journal, 18 March 03

Goodwill

- Does not arise in pooling situations
- Assets and liabilities of acquired company (subsidiary) need to be at **fair value**
- Cost of acquisition is at **fair value**
- Only post-acquisition profits are included
- Goodwill is calculated as follows:

Cost of investment
(FV of assets/liabilities acquired)
Goodwill

What is an impairment charge?

- An impairment charge brings the reported asset value down to its estimated recoverable amount
- It's like a BIG, one-off depreciation/amortisation charge

- For example:
  - Asset's book value = £100
  - Estimated net selling price = £85
  - Estimated value in use = £90
    - Impairment charge = £10 (£100 - higher of (£85 and £90))

Lots of creativity potential….

- Impairment tests over goodwill have become increasingly common in accounting rules (from mid 90's)

Goodwill summary

- EV: no amendment
- EBIT: should exclude goodwill amortisation and any non-recurring impairments
- Earnings: as per EBIT (keep tax effects in)
- DCF: remove amortisation/impairment charges as non-cash

Conclusions: how analysts use corporate information

- All information provided by companies should be considered when analysing the company
- Adjustments should be made to reported data and these factored into forecasts
- Different policies should be addressed
- There is no one 'correct' approach to equity valuation
- A good grasp of accounting is essential - there are no simple short-cuts
- What is most important are the value drivers ...

… and how the analysts' interpretation of the qualities of a company differ from the view of the market