Comprehensive income

- **In UK, FRS3 has two performance statements**
  - profit and loss
  - statement of total recognised gains and losses (STRGL)
    - profit for the year (just one line)
    - items recorded in reserves
- **Comprehensive Income (CI) combines the two statements, profit and loss and STRGL, in to one**
- **UK, FRED22 (Dec 2000)**
- **the different sections are**
  - operating
    - continuing operations
    - acquisitions
    - discontinued
  - financing and treasury
  - other gains and losses
- **ASB and IASB joint project for 2003**
  - matrix format

- **matrix format**

	Items other than re-measurements	**Re-measurements**
Business – operating	(1)	(4)
Business – finance income	(2)	(5)
Financing	(3)	(6)

- **horizontal split to show**
  - operations separate from financial
  - business separate from financing
- **vertical split to show**
  - historical cost
  - adjustments from HC to fair value
- **problem (perhaps) is that one transaction might be separated out in to different boxes**
  - HC depreciation (1), extra depreciation if asset revalued (4)
  - Expected return on pension assets (2), difference between expected-actual return (5)
  - IASB suggest that normal stock write down (1), and abnormal write downs (4)

Views of AAA Standards Committee (Accounting Horizons, Sept 2000)

- **single statement preferable to many**
  - Maines & McDaniel, Accounting Review, 2000
  - Hirst and Hopkins, Journal of Accounting Research, 1998
- **assumes that prediction is helped by type of item**
  - main point: stock returns seem to differentiate between items of difference persistence
  - but persistence doesn't always link with type of item
- **why separate out operations and financial?**
  - no evidence that it's needed for equity valuation
- **Dhaliwal, Subramanyam and Trezevant, Journal of Accounting and Economics, Jan 1999**
  - Comp Income gives no improvement in predicting future cash flow

Dhaliwal, Subramanyam and Trezevant, Journal of Accounting and Economics, Jan 1999

- **Comp Income gives no improvement in predicting future cash flow**
- **regression tests**
  - $R = a + b.NI + u$
  - $R = a + b.Comp_{broad} + u$
  - $R = a + b.Comp_{narrow} + u$

  where
  - R = annual stock return
  - NI = profit
  - $Comp_{broad}$ = NI + broad range of dirty surplus items
  - $Comp_{narrow}$ = NI + narrow range of dirty surplus items
    - gain/loss on marketable securities
    - FX adjustments
    - extra pension costs from prior years

  all items contemporaneous

- **Table 2:**

Regression: R = a + b.Y + u

b for Y= NI	b for Y= Comp $_{broad}$	b for Y= Comp $_{narrow}$	R^2
.66			3.81%
	.59		3.51%
		.68	4.20%

Regression: R = a + b.Y + u

b for Y= Comp Securities	b for Y= Comp FX	b for Y= Comp Pensions	R^2
.68			4.22%
	.66		3.81%
		.66	3.79%

- **gains/losses on securities add the value to NI**

- **for companies with large comprehensive income adjustments (top decile)**
- **from Table 4:**

Regression: R = a + b.Y + u

R^2 for Y= Comp Securities	R^2 for Y= Comp FX	R^2 for Y= Comp Pensions
19.49%	4.70%	3.64%
(8.96%)	(4.76%)	(3.64%)

- **( ) is R^2 for NI for the sample being investigated**

- **similar results to whole sample**

- **Cashflow$_{t+1}$, NI$_{t+1}$ on LHS**
  - dependent on
    - a + b.NI + u
    - a + b.Comp$_{broad}$ + u
    - a + b.Comp$_{narrow}$ + u

	R^2 (%)	**R^2 (%)**
	CF_{t+1}	**NI_{t+1}**
NI	**16.54**	**30.69**
Comp$_{broad}$	**11.43**	**22.35**
Comp$_{narrow}$	**13.04**	**27.06**

- **comprehensive income is not an improvement on NI**
- **however, CI is also about partitioning NI in to its components**
  - not just about additions to NI

- **it's also about format**
- **but why should format matter unless the information is useful?**
- **good question, but might be *some* companies for which CI is useful**
- **but the items in STRGL are already in reservesnote**
- **so why need a special statement?**

- **the format of information matters**
  - contrast with naïve EMH position, in which format is irrelevant
    - disclosure is what matters
  - modern EMH position allows departures from full impounding if processing costs are high enough
    - but then, what does this form of EMH predict about the impounding of information?
    - what constitutes a rejection of EMH?

Maines & McDaniel, Accounting Review, April 2000

- **impact of CI format on non-professional investors (NPI)**
- **experiment with 95 MBA students, about US standards**

- **SFAS 130, Reporting of comprehensive income, issued 1997**
- **it allows 2 formats**
  - statement of changes in stockholders' equity (130EQ)
    - will include capital changes
    - eg dividends
    - eg new equity capital raised
  - income statement format (130IS)
    - similar to STRGL
    - profit or loss as one line
    - non P&L gains and losses
  - 2 examples from Maines

- **Prior work: Hirst and Hopkins (JAR, 1998) examine analysts**
  - analysts fail to acquire the non P&L gains/losses when in 130EQ format
  - makes sense, since analysts use a directed search strategy, and therefore miss the information
- **NPI (and less experienced analysts) acquire information differently**
  - NPI read financial statements from cover to cover, ie in the order presented
  - therefore, NPI will acknowledge the information, but *may* underweight it in their decisions
- **Maines & McDaniel use insurance company**
- **two versions of accounts**
  - low volatility and high volatility of non P&L gains & losses
- **two formats**
  - 130EQ and 130IS

- **MBA students asked to**
  - assess volatility of non P&L gains/losses
  - on a scale of 1(low risk) to 14 (high risk)

Average perceived volatility of non P&L gains/losses (from Table 2)

	Low volatility sample	High volatility sample	't' for difference
130EQ	7.74	9.25	1.51
130IS	6.13	9.36	3.23

- **in both formats, differences in volatility are recognised (only just for 130EQ)**
- **lower vol assessed better with 130IS (6.13 vs. 7.74) but**
- **130IS(high-low) not significantly different from 130EQ (high-low)**
- **seems some evidence of poor assessment with 130EQ, but M&M argue not**

- **MBA students asked to**
  - assess the risk of investing in the stock
  - on a scale of 1(low risk) to 14 (high risk)

Average of stock risk judgements (from Table 4)

	Low volatility sample	High volatility sample	't' for difference
130EQ	**7.00**	**7.88**	**0.88**
130IS	**5.00**	**7.93**	**2.93**

- **risk judgement affected by 130EQ**
  - can't really tell the difference between low and high volatility, even though they have the information

- **Regression test of risk assessment (from Table 4)**

- **Risk assessment = a + b. (Perceived volatility)**

	b (t stat)	R^2
130EQ	0.17 (1.03)	0.00
130IS	0.36 (2.49)	0.15

- **risk assessments for 130EQ are unrelated to perceived volatility**
  - because the volatility is under weighted
- **risk assessments for 130IS are significantly related to perceived volatility**