

## Has accounting earnings become more conservative over time?

Conservatism is a well recognised feature of accounting measurement. Its function is to dampen down the potentially over optimistic expectations of investors. However, a concern amongst accountants is that accounting conservatism may now be doing too good a job. For example, press coverage for the last few years has suggested that both US and London stock markets are overvalued, as judged by their average P/E (price/earnings) ratios. However, now the attention is not on overinflated prices, but on under measured *earnings*.

One of the key papers, summarised below, which provides evidence suggesting that earnings are being underestimated is

**Givoly & Hayn, “The changing time series properties of earnings, cash flows and accruals: has financial reporting become more conservative?”, *Journal of Accounting and Economics*, June 2000, Vol 29/3, 287-320.**

### 1. The evidence of declining profitability

In their Table 1, Givoly and Hayn (GH) document, from all the companies in the Compustat database, a systematic decline in corporate profitability from 1950 to 1998. A summary of their evidence is given in the following table.

Period	Average annual <b>rate of return</b> on assets (%)	Proportion of companies recording <b>losses</b> (%)
1950-55	7.8	1.67
1971-75	3.5	15.48
1991-98	-8.0	33.58

The annual rate of return is declining and is even negative in the period 1991-98. The proportion of companies making a loss is also increasing. This pattern is also true for a smaller constant sample of companies, that is companies which exist throughout the period 1950-98.

### 2. The cash flow performance of companies

One of the interesting pieces of evidence provided by GH is the cash flow equivalent of their Table 1 (which is summarised above). In their Table 3, GH show for the same companies as Table 1: (i) the cash flow from operations to total assets; and (ii) the relative frequency of negative cash flow from operations. Their results are summarised below, and provide a stark contrast to the earnings evidence.

Period	Average annual <b>cash flow from operations</b> -to-total assets (%)	Proportion of companies showing <b>negative cash flow from operations</b> (%)
1951-55	9.7	11.02
1971-75	8.3	13.6
1991-98	8.8	6.57

This table shows that (in contrast to the earnings measurements) the cash flow performance of companies has been remarkably stable over the 1951-98 period.

So what is the explanation for this significant discrepancy? The obvious answer is in accounting accruals, since accruals represent the difference between accounting measurements and cash flows. But what has been happening to accounting accruals over time?

### **3. The behaviour of accounting accruals over time**

Let's first be clear about the definitions of accruals used in the GH paper.

Operating accruals =  $\Delta$ Accounts receivable +  $\Delta$ Inventories +  $\Delta$ Prepaid expenses -  $\Delta$ Accounts payable -  $\Delta$ Taxes payable

These operating accruals arise from the day to day business of the company.

Total accruals (before depreciation) = Net income + depreciation - cash flow from operations

Note that typically, depreciation is part of accruals, usually termed long term accruals. However, in the GH paper, accruals do not include depreciation.

Non operating accruals = Total accruals (before depreciation) - Operating accruals

These items are typically provisions for bad debts, provisions for losses, restructuring charges. They are charges (and write backs) to the profit and loss account which are not part of the day to day business of the company.

The behaviour of accruals over time is reported by GH in their Table 4. This gives the accruals behaviour for a constant sample of 896 companies, and is summarised below. For this table, annual averages are not given, but instead accruals and cash flows are accumulated over the period. This gives an overall picture and not just an average one. The figures are also deflated by (accumulated) sales.

Period	Average Accumulated <b>Total accruals (before depreciation)</b> deflated by Sales (%)	Average Accumulated <b>Non operating accruals</b> deflated by Sales (%)	Average Accumulated <b>Cash flow from operations</b> deflated by Sales (%)
1951-80	-12.8	-1.6	6.1
1981-98	-54.6	-51.2	7.4

The results show that cash flow from operations remained much the same <sup>1</sup>. However, non operating accruals became far more negative, thus making total accruals more negative. This suggests that accounting earnings has become much more conservative over time.

#### **4. What's wrong with accounting?**

##### **I - EXCESSIVE PROVISIONS**

This question is not really addressed by GH. One way of looking at the trend is that companies are making provisions that are far in excess of what is needed. This interpretation fits in well with UK views of the way the US treats deferred taxation. The US approach to making full provision is far more conservative than the partial provision which was normal practice until very recently when FRS 19 required the full provision method in order to comply with pressure from the International Accounting Standards Committee. However, even now the UK method is still less conservative than its US counterpart.

##### **II - DIFFERENT FROM INTANGIBLE ACCOUNTING**

GH also point out that this weakness of accounting is quite different from other weaknesses of accounting being highlighted, such as (i) writing off the cost of intangible assets (such as advertising expenditure) in the profit and loss account (ii) using historical cost to value those intangible assets which *may be* recognised (such as R&D) by the accounting system.

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<sup>1</sup>The increase from 6.1 to 7.4 is not statistically significant.