False impressions

Financial markets are inherently unstable, says **Andrew Smithers**, and the view that corporate balance sheets are in good shape is an illusion

Financial markets are liable to shocks in many forms. Political and economic events are by no means the only ones. The markets are inherently unstable and, as we have seen recently, can cause their own upsets. Data surprises are another possible source of trouble. Investors can be frightened when information, which they had previously seen as certain, proves to be illusory.

The belief that "corporate balance sheets are in good shape" has the perfect qualities for providing future shock. It is widely held as an article of faith and is probably wrong.

The illusion depends on high asset prices and will probably continue as long as they last. Asset prices are thus unlikely to start falling because investors suddenly become alert to the issue. More probably, they will realise that corporate balance sheets are over-leveraged when asset prices have already fallen. The ill-judged faith in corporate balance sheets is thus likely to crumble with share prices and thereby amplify the size of the fall.

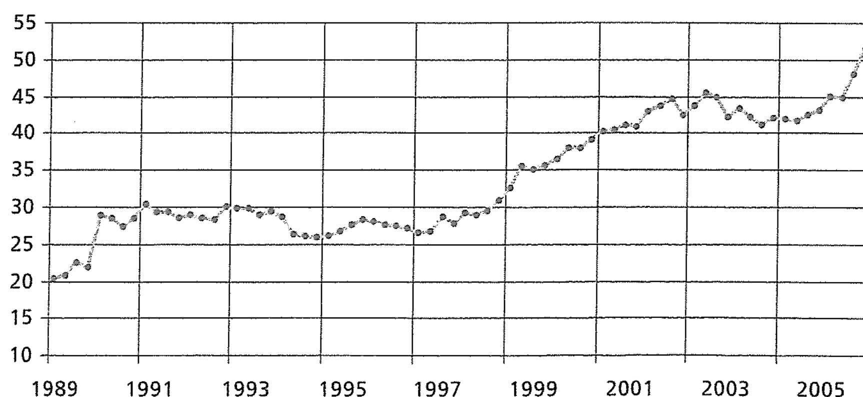
Faith in today's balance sheets is justified if uncritical comparisons are made between the data published by companies today and those of a decade or more earlier. National account data, however, reveal a different picture. The Bank of England recently put high corporate leverage among its key sources of vulnerability for the UK financial system and showed that net debt had risen from 25 per cent to 50 per cent of non-financial companies' assets at replacement cost (chart 1).

> Uncritical comparisons should not be made between company data published today and those of a decade ago

The divergence between company and national accounts depends on the different conventions used. In broad terms, national accounts assume that assets are worth their cost of production, adjusted for inflation, after a deduction for depreciation, while corporate accounts seek to allow for market prices whenever possible.

The difference in corporate leverage has become stronger in recent years for three reasons. The first has been an increasing emphasis on "marking to market" in corporate accounts. Second has been the rise in the share of corporate profits attributable to financial companies, most of whose assets are financial rather than tangible. The third has been the growth, even in balance sheets of non-financial companies, of financial assets, which have risen in the US from being equal to 30 per cent of tangible assets and net worth in 1952 to over 80 per cent.

Chart 1 – UK: Private Non-financial Companies Leverage.



Source: Bank of England

Net debt as % of Assets at Replacement Cost

Because of these changes today's company accounts should not be compared with those of a decade ago. The comparison is not, as usually presented, between good apples today and bad apples yesterday, but between bad apples today and bad pears yesterday.

A fair comparison can, however, be made if UK national accounts are used, as they are prepared on a reasonably consistent basis. These show that balance sheets have deteriorated to a worrying extent.

The situation in the US is basically the same as in the UK. If the flow data from the US national accounts are used for balance sheets, as they are in the UK, then US non-financial corporate leverage is also seen to be high and rising.

The balance sheet data published by the Federal Reserve, in the Flow of Funds Accounts, do not, at first glance, show rising debt levels, but this is only because the figures are adjusted to conform with the accounts published by companies by the addition of "statistical discrepancies", which run at more than $800bn a year.

Corporate leverage is usually measured both in terms of interest cover and asset cover, the former being a profit and loss account ratio and the latter a balance sheet ratio. The weaknesses of interest cover are that the ratio is flattered by high margins, low inflation and narrow credit spreads, all of which we have today. Interest cover is thus a poor and fleeting indicator of financial stability. To avoid these problems,

leverage can be measured in terms of the ratio of net debt to output and this shows that US non-financial corporate leverage is high and rising.

While I am hopeful that low inflation is here to stay, the outlook for credit spreads is doubtful and that for profit margins is bad. Marking to market not only gives a false impression of current balance sheet strength, it has led to profit and loss accounts becoming disconnected from corporate cash flow.

One of the myths widely believed by equity analysts is that corporate profits after tax plus depreciation are equal to the cash generated by the corporate sector. But rising asset prices do not generate cash. For companies as a whole, even realised asset sales do not generate cash unless the sales are made outside the sector, though passing the parcel at rising prices gives this illusion.

Another consequence of marking to market is that the published earnings per share (EPS) of listed companies have become more volatile in recent years, despite the fact that the economy has become less volatile. This divergence is a consequence of rising leverage, both on- and off-balance sheet, and the increased sensitivity of published profits to changes in assets' prices.

Over the post-war period, National Income Product Accounts (NIPA) profits after tax and EPS on the S&P 500 have moved closely in line. In recent years, however, the scale of the temporary divergences has risen. As chart 3 shows, NIPA profits fell from 1997 to 2001 while S&P EPS rose. The difference was then made good with a substantial overshoot, as S&P EPS fell dramatically, but the two series had come together again by 2004.

There are three main differences between NIPA profits and S&P 500 profits. First, not all US companies are listed or part of the S&P 500; second, NIPA data exclude the foreign profits of US companies; and third, S&P profits are "marked to market". There is strong evidence that the third difference is by far the most important, as the difference between NIPA profits after tax and S&P 500 EPS has closely tracked stock market changes.

In the apparent disagreement between the Bank of England and the view found in the financial press or analysts' reports, I side with the Bank. The idea that "corporate balance sheets are in good shape" seems to me to be an illusion.

> The outlook for credit spreads is doubtful and that for profit margins is bad

As chart 2 illustrates, profit margins are high and strongly mean-reverting. Some time over the next few years, therefore, it is highly probable, though of course not certain, that profits will fall sharply. If, as seems likely, the stock market is also weak at the same time, the profits shown by companies are likely to fall even more than those recorded in national accounts, and balance sheets, as published, are likely to deteriorate sharply. The excessive confidence about corporate leverage is then likely to swing into excessive pessimism.

Private equity is particularly exposed to this change. The managers of these funds appear to believe that, first, current high profit margins can be extrapolated into the future; second, that with their new management, these margins can even be improved; third, that the benefits of such improvement can be increased by leverage; and fourth, that the stock market will be as buoyant in the future as it is today. None of these assumptions seems to me to be likely. As profits start to fall, I expect my scepticism to be matched by those who are currently happy to lend to private equity.

The debt-funded buying of shares by companies must surely fall sharply. As chart 4 shows, they have in recent years been the only significant net buyers of shares. Once profits start to fall and lenders become cautious, it seems unlikely that other buyers will come in to support the stock market – at least at today's prices.

Sovereign funds, notably those of China, Russia and Opec, have the wherewithal to replace corporate buyers, but there are two problems that are likely to prevent them from stabilising stock markets at current prices.

The first is that these buyers are unlikely to increase their purchases suddenly in the event that corporate buying drops off sharply. The second is that the political repercussions are such that a smooth transfer of corporate ownership to foreign governments seems, to put it mildly, improbable.

The underlying problem is that stock markets are vulnerable because they are overpriced. Early in November, the US stock market was selling at over 18 times

Chart 2 – US: Corporate Profit Margins 1926–2006.

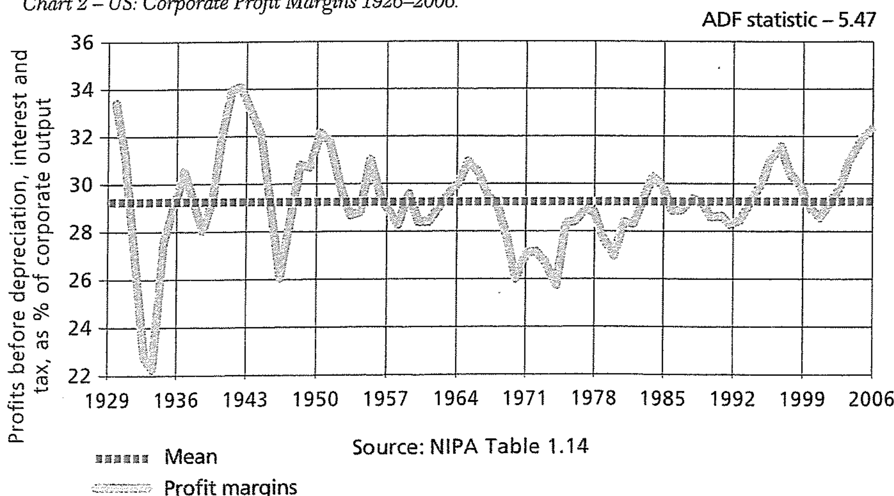
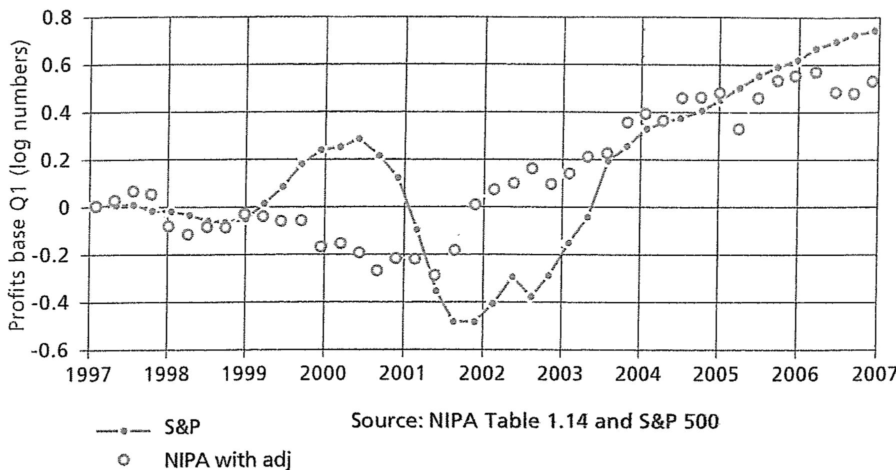


Chart 3 – US: NIPA Profits after Tax and S&P 500 EPS



Source: NIPA Table 1.14 and S&P 500

the previous 12 months' earnings, compared with a strongly mean-reverting average of 14. This would be fine if profits were depressed but, as chart 3 shows, they are very high. For the stock market to be reasonably priced, the PE on trailing earnings would need to be well below 14.

The argument of those who believe the market is not overpriced is that profits will rise next year so that the forward-looking PE is only, say, 16, and this is reasonable because either it is in line with the average or it is justifiable at current interest rates.

There are many errors involved in this argument. One is that markets can be valued in terms of current PEs; another is to miscalculate averages by a combination of bad mathematics and data mining; and a third is to assume that stock markets can be valued relative to bond yields or other interest rates.

At the end of 1932, the US stock market was selling at a current PE which was well above its long-term average. But we also know from hindsight that in 1932 the stock market was about as cheap as it has ever been.

Those who argue that current PEs are a guide to stock market value are thus either abysmally ignorant of stock market history or "logically challenged".

The average PE can be, and usually is, inflated by miscalculating it – for example, by using the arithmetic rather than the geometric mean, and by calculating it over recent periods in which the market has been overpriced.

The bond yield ratio is pure drivel, supported by neither theory nor experience. It confuses the return on bonds, which are nominal assets subject to impairment from inflation with equities which are titles to the ownership of real assets. Belief in it arose because there was a strong correlation from 1967 to 1997 between the earnings yield and the bond yield. There was, however, an even stronger negative correlation from 1948 to 1967 and there is no long-term correlation whatever.

> The underlying problem is that stock markets are vulnerable because they are overpriced

Overvalued markets do not necessarily fall back to fair value in the short-term. If they did, even analysts would probably notice. It is only in extremes, such as during the peak in March 2000, that markets become sufficiently overpriced for value to be any guide to short-term market performance. While markets today are overvalued, the major ones are around the nominal values they had seven years ago. As inflation and some plough-back has increased their underlying value in the meantime, they are at least 30 per cent less overpriced than they were then.

Today's overvaluation represents a warning rather than a short-term forecast and world markets may hold up or even rise over the next 12 months. Looking further ahead, however, investors should be aware that the downside potential for asset values looks far greater than the upside.

Investors should thus be very wary. As the Bank of England has repeatedly stressed, risk has become underpriced. The result is that risky assets, of which shares are an outstanding example, have become overvalued. As risk becomes more sensibly priced, the price of risky assets will fall.

The additional problem for shares is that changes in corporate accounting have made the profits and balance sheets of companies increasingly sensitive to asset prices. As asset prices decline, the published profits and balance sheets of companies will deteriorate faster than before and provide a feedback-loop that is likely to accentuate the fall.

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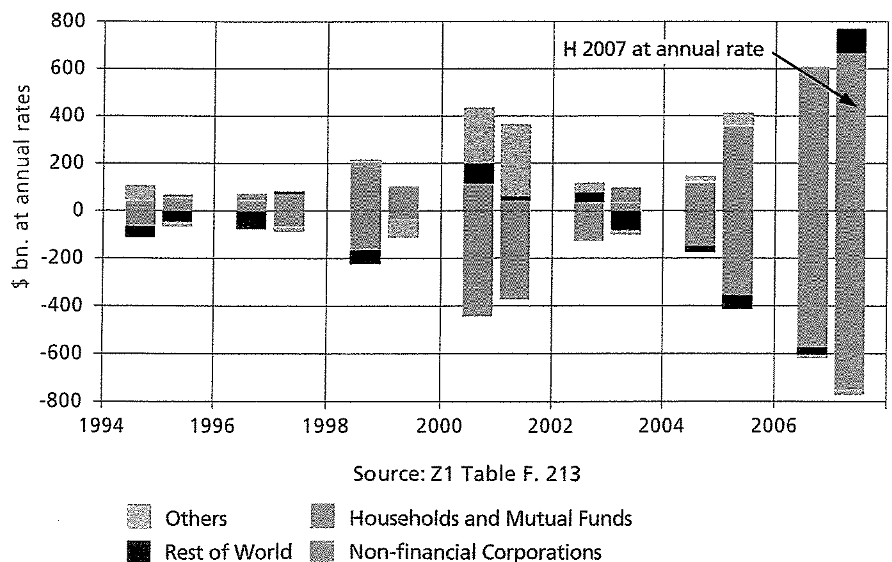
Chart 4 – US: Net Buyers and Sellers of Equities



Source: Z1 Table F. 213