Statistical revisions show how America's recent productivity boom is less remarkable than was once thought

DOTCOM firms have collapsed, and all those business-cycle obituaries now look premature, but so what? The most important part of America's "new economy", namely its productivity miracle, remains intact. That was the view of most commentators this week following the release of new productivity numbers. The assessment is too rosy, as the revised figures themselves confirm on closer inspection. America's productivity growth is higher now than it was before 1995—but the gains have been exaggerated.

Productivity rose more than expected in the second quarter of this year, the new figures show, but part of America's previous surge has now been revised away. According to the old figures, annual productivity growth averaged 3.4% in 1999-2000. That has now been shaved to 2.6%.

Most commentators found relief in the fact that average annual productivity growth in the five years to 2000 had been revised down only modestly, to 2.5%, well above the rate of 1.5% in the first half of the 1990s. On the other hand, Alan Greenspan, the chairman of the Federal Reserve, had placed huge weight on the fact that productivity growth had been accelerating—to 4.3% last year by the old figures. On this basis, he believed that structural productivity growth, after stripping out the cyclical impact of the economic boom, was around 3%. Most of the acceleration in productivity has now vanished, with the new figure for 2000 chopped to 3% (see chart).
What is more, recent productivity gains have been exaggerated not just by the cyclical impact of the boom, but also by an unsustainable surge in investment in information technology that has now gone into reverse. Over-exuberant expectations about profits, allied with an artificially cheap cost of capital thanks to a stockmarket bubble, encouraged firms to over-invest. Investment in information technology has plunged this year, and slower investment growth in future will mean slower productivity growth.

A study published in May by Goldman Sachs estimated that structural productivity growth was 2.25%. Since then, the data revisions and a steeper than expected slump in investment suggest that 2% might be closer to the mark. Add in a 1% annual growth in the labour force. America's potential growth rate then comes to around 3%, rather than the 4% that most American economists had been counting on.

Productivity growth of 2% would still be pretty impressive by historical standards. Those who thought that growth of 3-4% was sustainable were, in effect, making the bold claim that IT would have a far bigger economic impact on America's economy than any earlier technological revolution. The Fed is fond of a chart that shows how productivity grew by an average of 3.8% during 1917-27, thanks to the widespread adoption of electrical power. Sustained productivity growth today of 3%, then, does not seem outlandish. However, the period 1917-27 is misleading, for productivity was unusually depressed in 1917. Over the period of 1919-29, productivity growth in the non-farm business sector was a more modest 2.3%.

Government statisticians have taken their axe not only to productivity. They have also made huge revisions to corporate profits as measured in the national accounts. Stockmarket bulls drew comfort from the reported surge in American profits during the late 1990s. It was argued that this growth would increase the slice of GDP going to the providers of capital, validating at least some of the rise to unprecedented levels of the price-earnings (p/e) ratio of American shares.

The revised data tell a different story. For the first quarter of this year, the level of after-tax profits of non-financial companies is now more than 20% lower than originally reported. The new figures show that total profits as a share of national income has dropped sharply, from over 12% in 1997 to just 8% last year. An analysis by Ed McKelvey at Goldman Sachs identifies two main causes for the revisions. First, government number-crunchers have discovered more firms making losses than were previously estimated. Second, more employees have exercised stock options than had been expected.

Clearly, companies earned a lower return on the investments they made. This may lead them to be less optimistic about the likely returns available from future investment, which bodes ill for a swift end to the slump in capital spending. Thinner profit margins, in turn, also suggest that firms may be under greater pressure to cut costs, which could extend America's downturn.

Not least, the revisions to productivity and profits raise questions about the level of share prices. Assuming profits as reported in the GDP data move in line with profits reported publicly by companies, profits are likely to fall even further relative to GDP this year. Economists at CSFB estimate that total profits dropped by over 10% in the year to June 2001—and, judging by the continuing stream of disappointing announcements from companies, the profits plunge is not near its end.
What does this imply for share prices? That depends on the extent to which the stockmarket is a rational place, or at least is becoming more so. The fall in profits means that p/e ratios remain high by historical standards, even though big-company share prices have, on average, been flat at best for the past three years, and the share prices of many technology companies have plunged in the past year.

In the long run, profits seem destined to grow in line with GDP—just as they have, on average, for decades. Yet the current level of share prices seems to imply real long-term growth in profits far in excess of likely real GDP growth of, say, 3%. If so, the stockmarket remains a hazardous place for the rational investor.

On the other hand, the rational investor might have avoided the stockmarket for much of the unprecedented bull run of the 1990s. Indeed, periods of gloom about profits have often proven to be the “point of maximum pessimism”, at which investing generates the highest returns—precisely because of the considerable contrarian courage required. The Leuthold Group, a research firm, calculates that share prices have risen in each of the nine worst years for profits over the past half-century. On average, share-price gains in those years have far outperformed the long-run average for the stockmarket. Will history repeat itself this year? Not so far.