

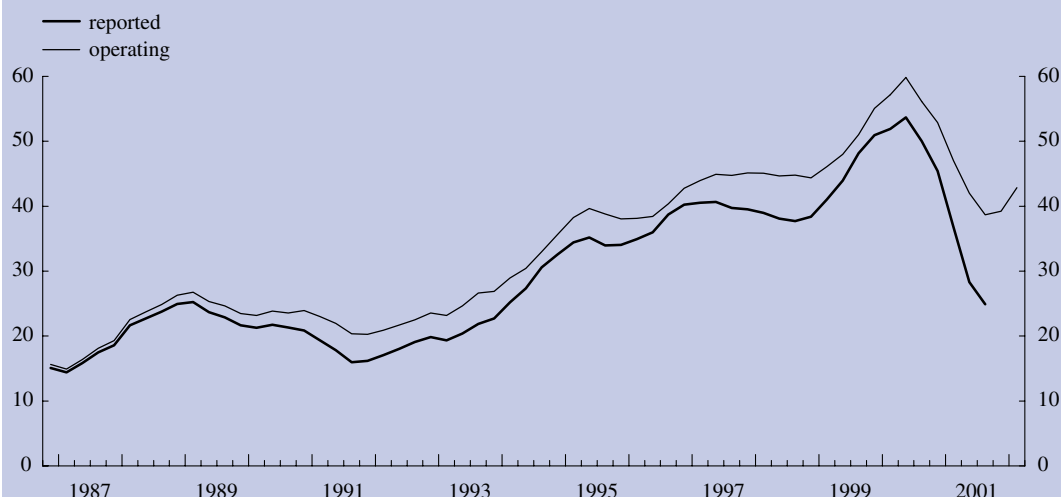
Box 3

US stock markets and corporate profit measures

Over recent months, stock markets in the United States and the euro area have been adversely affected by uncertainties about the reliability of profit data disclosed by US corporations. In particular, attention focused on the emergence in 2001 of growing disparities between different measures of corporate profits following the collapse of a US energy corporation, Enron, which filed for bankruptcy in December 2001. While the actual profits of the 500 corporations in the Standard & Poor's 500 index "reported" to the US Securities and Exchange Commission (SEC) declined by 51% in 2001, on an "operating" basis (i.e. profits from a corporation's ongoing operations), according to Standard & Poor's estimates, they declined by only 31% (see Chart A).

Chart A: Earnings per share of the 500 corporations in the Standard & Poor's 500 index

(four-quarter moving averages in US dollars, quarterly data)



Source: Standard & Poor's.

Note: The series for "reported" earnings denotes the earnings per share of the corporations in the Standard & Poor's 500 index disclosed to the US Securities and Exchange Commission. The series for "operating" earnings denotes the earnings per share derived from ongoing operations. Data for the latter are estimates as from the fourth quarter of 2001.

The reason for the disparities between the two measures of Standard & Poor's 500 corporate profits shown in Chart A is due to differences in the accounting concepts which each figure is designed to measure. The corporate earnings which US corporations disclose to the SEC are generally known as "reported earnings". They represent the profits of a corporation before the deduction of expenses arising from discontinued operations and extraordinary items. The figures must be prepared according to the Generally Accepted Accounting Principles (GAAP)¹ and are subject to audits.

"Operating earnings" are typically calculated by adjusting reported earnings figures to exclude certain non-recurring expenses such as those associated with mergers and acquisitions or litigation settlements. They

¹ Dating from the 1930s, the US Generally Accepted Accounting Principles (GAAP) represent a largely rules-based approach to financial reporting that is generally accepted by the US accounting profession. In effect, GAAP specifies acceptable and unacceptable ways of accounting for business revenues and expenses. Since 1973, the US Financial Accounting Standards Board (FASB) has been responsible for developing GAAP.

typically also exclude gains or losses from asset sales. The guiding principle for using operating earnings figures for a corporation is to provide market analysts with information that helps them to determine the company's underlying profitability performance. By contrast with GAAP-based reported earnings, operating earnings figures are unaudited. They are not governed by the SEC, unless fraudulent, and they are not drawn up by accountants according to a set of generally agreed principles.

A further measure of profits is a "pro forma" statement of operating earnings. Originally, the purpose of a pro forma analysis of a corporation's profit and loss accounts was to adjust its profit figures in order to exclude any significant changes, e.g. a merger. In the past, these accounts were typically prepared by corporations for internal purposes only. However, following the wave of mergers in the US in the 1980s, many corporations began to publish these data. This was because, over time, corporate changes of this kind, which may have completely altered the underlying nature of the respective business, made it more difficult for market analysts to interpret accounts prepared under GAAP from one year to another. Subsequently, the practice of publishing pro forma accounts became more widespread. Similar to operating earnings figures, pro forma operating earnings figures are unaudited, are not governed by the SEC and there are no generally agreed principles among accountants to prepare them. A working definition of pro forma earnings set out by Standard & Poor's is "operating earnings should a particular event occur".²

As Chart A shows, after the third quarter of 2000, the profits of Standard & Poor's 500 corporations reported to the SEC came under pressure. This led to the most severe cumulative downturn in the profits of Standard & Poor's 500 corporations since the 1930s. Like earlier profit downturns, the gap between reported and operating earnings widened, with the latter showing a more robust performance. Moreover, pro forma statements of corporate profits, not shown in this chart, exhibited an even milder downturn than either of the two other measures. While it might be considered normal that the underlying capacity of corporations to generate profits in the longer term, as reflected by pro forma operating profit figures, would not deteriorate to the same extent as cash profits in a cyclical downturn, some market analysts queried the adjustments made for certain accounting items in the preparation of pro forma statements of profits in 2001. In principle, the adjustments should be for non-recurring items only. However, in drawing up their pro forma statements of profits, some corporations excluded irregular expenses, e.g. severance packages, compensation costs related to stock options and losses in the value of securities in corporate-sponsored, defined pension plans. This approach prompted questions from some market analysts who considered such items as part of the normal ongoing activities of corporations and it also gave rise to uncertainties in stock markets about the transparency and accuracy of the accounting information disclosed by corporations. Particularly affected by these uncertainties was the technology sector, where the gap between reported and pro forma earnings grew wider than in any other sector in 2001.

Key to the valuation of the stock of a corporation is its capacity to pay out dividends to shareholders over the longer term. This, in turn, depends on the capacity of corporations to generate earnings. Reflecting this, for more than a century, one of the metrics most commonly employed by stock market analysts to judge the value of the equity of a corporation has been the price-earnings (P/E) ratio. This is the ratio between the value of a corporation reflected in its stock price, and its annual profits. Often these ratios are calculated on the basis of the profits generated by a corporation over the previous calendar year (i.e. a four-quarter moving average of profits). For a market index such as the Standard & Poor's 500, the P/E ratio is the average of the P/E ratios of the individual corporations in that index.

Over long periods, the inverse of the P/E ratio, the earnings yield, should in principle equal the real return to a shareholder from an equity investment. Hence, the inverse of the P/E ratio is often seen as the real cost of equity capital to corporations. Based on the view that, over very long horizons, future profit growth rates will

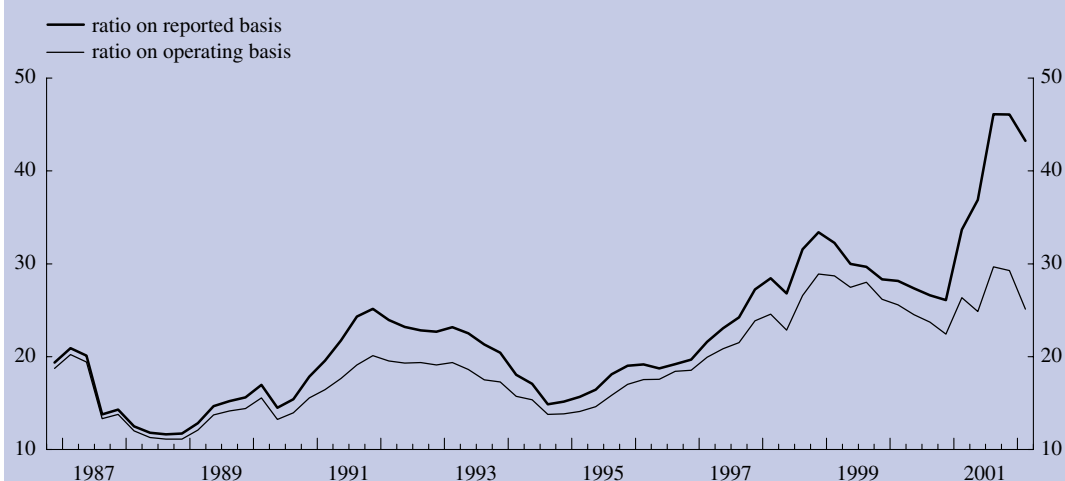
² See 'Standard & Poor's Position on Operating Earnings', Standard & Poor's, November 2001.

mirror historical averages of profit growth, the fair value of a stock is often judged by comparing prevailing P/E ratios with historical averages. However, it should be borne in mind that a high P/E ratio for an individual corporation or sector could reflect market expectations that future profits will be high and, on account of this, investors will demand a lower real return on equity in the short run.

Calculated on the basis of the previous four quarters of earnings, P/E ratios tend to be higher when the economy is in the midst of an economic slowdown since, at those times, profits tend to come under pressure. As Chart B shows, this cyclical behaviour of P/E ratios tends to be more pronounced for ratios computed with reported earnings than for ratios computed with operating earnings. The lower cyclical amplitude of the latter

Chart B: Price-earnings ratios on an operating and a reported basis for the 500 corporations in the Standard & Poor's 500 index

(quarterly data)



Source: Standard & Poor's.

Note: The figures are computed on the basis of the Standard & Poor's 500 index. The P/E ratios are computed using four-quarter moving averages of the earnings measures. The P/E ratio on a reported basis for the first two quarters of 2002 are computed using profit figures of the fourth quarter of 2001. The P/E ratios on an operating basis from the fourth quarter of 2001 onwards are computed using Standard & Poor's estimates from the fourth quarter of 2001 onwards. For both series, P/E ratios for the second quarter of 2002 are computed using the closing value of the Standard & Poor's 500 index of 30 April 2002.

is natural in view of the principle – to provide a picture of the underlying profitability performance of corporations – under which operating earnings figures are computed. This notwithstanding, the emergence of an unprecedented gap between pro forma operating and reported earnings also led to a large disparity between the P/E ratios computed using these measures. The doubts prevailing in markets about the true profitability performance of corporations resulting from questions on the accounting treatment of certain items in the preparation of pro forma profit statements, in turn, led to uncertainties about which P/E ratio best reflected the value of corporations. As noted above, these uncertainties also spilled over into the euro area, since the stocks of some large euro area corporations are also listed on US stock exchanges.

Transparent and accurate accounting information is crucial in order to ensure the efficient allocation of scarce capital to the most productive uses in the economy. Moreover, it plays an essential part in the integration of private capital markets within the euro area. In this respect, the European Commission has been promoting a strategy for financial reporting in the EU based on a principles-based approach to accounting that differs from the rules-based US GAAP system. In March 2002 the European Parliament endorsed the Commission's proposal that all EU companies listed on regulated markets should, at the latest from 2005 onwards, prepare and publish their consolidated accounts in accordance with a single set of accounting standards, to be selected in the near future by the Commission from among the models of International Accounting Standards (IAS)

issued by the International Accounting Standards Board (IASB).³ Following an informal meeting of the ECOFIN Council in Oviedo, Spain, in April 2002, the Economic and Finance Ministers, the Commission, the President of the ECB and the Governors of the national central banks emphasised that an “early adoption of the EU Regulation on International Accounting Standards is of particular importance, along with strong enforcement, so that International Accounting Standards will enter into force throughout the EU.”

³ *The International Accounting Standards Board is an independent, privately funded accounting standard setter based in London. Board Members come from nine countries and have a variety of functional backgrounds. The Board is committed to developing, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements. In addition, the Board co-operates with national accounting standard setters to achieve convergence in accounting standards around the world.*