

CORPORATE EARNINGS ON THE RISE

The trend in listed company profits: bullish but volatile

Corporate earnings are key to several areas of economic analysis, both theoretical and applied, such as macroeconomics, microeconomics, corporate finance and stock valuations, to cite just a few of those most keenly interested in this variable. An accurate idea of the trend in earnings is therefore elemental to compare and apply theoretical frameworks successfully. There are essentially two sources of information for corporate earnings. National accounting systems, which provide data on a country's businesses as a whole; and the accounts presented by companies themselves at an individual level, which can also be grouped together to form an aggregate view, such as the companies within a particular stock market index.

The methodological criteria and technical details of these two sources clearly differ in crucial aspects. This article focuses on the accounts published by listed companies in the US,¹ specifically the companies in the S&P 500, an index that provides standardised series over a long timescale with a sector breakdown. We will also look at some figures from the euro area's MSCI index which includes the main listed companies for the region's countries. Given their origin, these data can obviously be used directly when analysing the areas of corporate finance and share valuations; for instance, to gauge the expected return from a diversified portfolio of US and/or European stock. Such stock market records may provide very valuable information for other areas of analysis, although they also contribute a lot of noise which should not be ignored. Whatever the case, an examination of stock market data highlights seven distinctive features of the dominant trend over the last two decades.

Before looking at these features in detail, we should first deal with two methodological issues. Firstly, and given that the profit made by a company carrying out its business is, essentially, the difference between the revenue generated by sales and the costs incurred, it is useful to separate two components on examining any trends. One is the volume effect; i.e. the increase in sales. The other is the margin effect; i.e. the change in profit produced by each unit of sales. The profit margin (profit divided by sales) will depend on how efficient a company is in terms of its processes and the cost of its products and factors employed. Secondly, it is important to remember that earnings can be measured at different levels of the profit and loss depending on the expenditure (costs) that is deducted from the revenue (sales). The two most widely-used measurements are net profit, which deducts all expenses, and operating profit, which only deducts operating costs.

The seven previously mentioned features are as follows:

One: growth in earnings has speeded up. Between 1991 and 2015, the earnings per share of S&P 500 firms increased on average by 4.5% as the compound annual growth rate (CAGR) in real terms. Between 1946 and 1990 the CAGR was 2.9% and only 0.7% between 1871 and 1945 (see the graph).

Two: the profits of S&P 500 companies have grown at a slightly faster rate than those of listed firms in the euro area, which recorded a 1.7% CAGR between 1996 and 2015.

Three: earnings have performed better than most production or income variables. In particular, real GDP in the US grew by 2.3% CAGR between 1996 and 2015 and by 1.4% CAGR in the euro area.

Four: sales have risen slightly less than GDP. Specifically, 1.4% CAGR for listed companies in the US and 0.8% CAGR for those of the euro area between 1996 and 2015.

Five: profit margins have increased and are at an all-time high. For listed US firms, profit margins have gone from 7.2% in 1996 to 8.4% in 2015. In the euro area they have gone from 3.6% in 1996 to 5.1% in 2015. In both cases this improvement lies behind more than half the increase in profits during that period.

Six: earnings have been more volatile than in the past. In statistical terms, the net profit variance of S&P 500 companies between 1991 and 2015 was nine times greater than between 1946 and 1990 and almost 30 times greater than in the years prior to 1945. The huge spikes occurring during the dot.com (1998-2000) and real estate (2005-2008) bubbles were offset by the slumps in 2001

1. The article «On the distribution corporate income» in this Dossier analyses the national accounting data.

and 2009. The operating profit variance has been markedly less than net profit variance but, in any case, the trend has been towards greater volatility in recent years.

Seven: the profits made by some sectors have grown much faster than others. Between 1996 and 2015, and in the case of the US stock market, among the best performers were healthcare (6.3% CAGR) and information technology (6.1% CAGR). Among the worst were utilities (-0.4% CAGR) and telecom services (-2.5% CAGR).²

Over the last few years a lot of interest has been shown, by economists, investors and others, in the reasons behind this rise in earnings. Attention has focused primarily on the three usual suspects when widespread, persistent phenomena appear, as in this case. These are technological change, globalisation and demographics. In fact, these forces may have been particularly significant for the large corporations that make up the S&P 500. Globalisation has opened up huge markets so that, today, close to one third of the sales of this select group of firms occur outside the US. Technological changes have helped to boost productivity and increase margins, especially in those sectors where competition is of a «winner-takes-all» nature. Acting as a boost in the first part of the period in question, in numerous sectors the effect of demographic changes on growth in sales has deteriorated over the last few years. But their impact can still be seen in the form of exceptionally low real interest rates, an important factor in the increase in profits over the last 20 years.

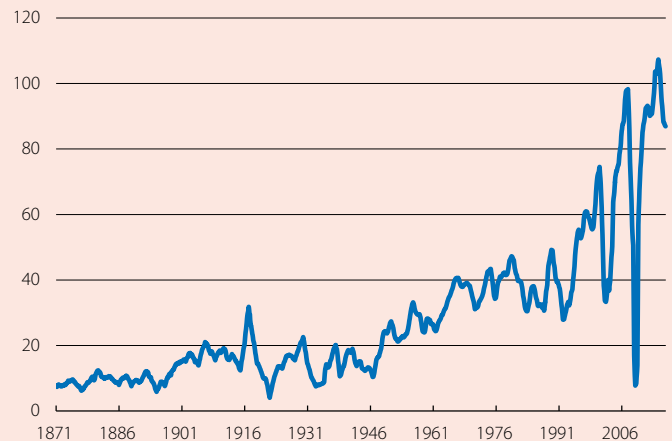
In addition to these fundamental forces there are two specific factors of a methodological nature that affect the S&P 500 earnings series: the changing composition of the index and the accounting criteria used to calculate the profit made by each firm. S&P 500 companies and their respective relative weights alter with the regular updates carried out of the index's components (some companies are replaced while others are included). The bias of the sector-oriented changes introduced over the last few years lies behind part of the rise in aggregate earnings. Those sectors with a larger profit margin and growth potential are precisely the ones that account for relatively more of the S&P 500 index, in several cases more than their weight in the economy as a whole. This is particularly the case of the information technology sector. The weighting effect has been less pronounced for the euro area index, which still concentrates on sectors with smaller profit margins and growth rates. Regarding the calculation of earnings, accounting rules allow companies to be relatively flexible regarding when they recognise certain items of revenue and expenditure. But absolute limits or thresholds are also set, so that earnings data often contain discontinuities or gaps. Under normal conditions, positive and negative gaps tend to cancel each other out for a broad index as a whole, as is the case of the S&P 500. But under systemic stress, the convergence of many different gaps in the same downward direction can extensively alter the index's earnings. This actually happened in 2001 and 2009. This phenomenon naturally affects net profit much more than operating profit but which of the two is more useful will ultimately depend on the issue under examination.

To sum up, an analysis of the trend in corporate earnings over the last two decades reveals that the sharp increase observed is mainly due to the margin effect as opposed to the relatively weak volume effect. The next article in this Dossier identifies the main forces that may have contributed to this improvement in profit margins.

Mathieu Fort
Financial Markets Unit, Strategic Planning and Research Department, CaixaBank

Real earnings per share of the S&P 500

(Dollars)



Source: CaixaBank Research, based on data from the website of Robert J. Shiller.

2. Given the high volatility of its profits over the last few years, the energy industry has been excluded from this comparison of sectors.