Net Profit Margin—Income to Revenue

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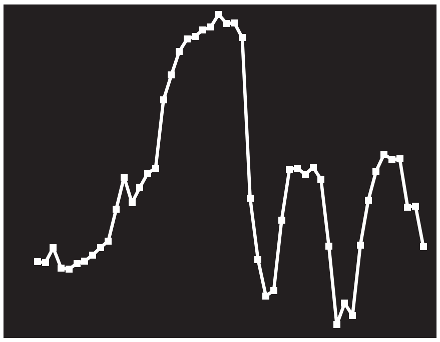
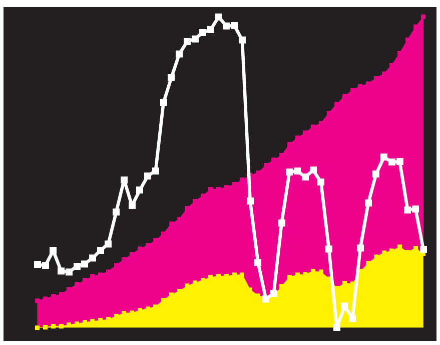
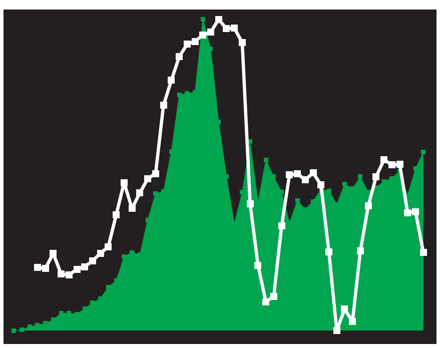


Net Profit Margin



NPM—Income and Revenue



NPM—Share Price

> The profit margin measures the fraction of each dollar of (revenue) that trickles down through the income statement to profits. This ratio is particularly important to operating managers because it reflects the company's pricing strategy and its ability to control operating costs.
>
> Robert C. Higgins—*Analysis for Financial Management*

Net profit margin shows you the portion of revenue that is income (profit). The remaining portion of revenue is costs.

Net profit margin (NPM), also known as margin or return on revenue, is income divided by revenue (*income / revenue*) × 100. Net profit margin is a percent.

Look at the history of this excellent company. Net profit margin goes up for a while, then there's the *dot-com boom* and *bust*, then it may be approaching an approximate limit, "because too-fat margins will invite competition", Martin S. Fridson—*Financial Statement Analysis*.

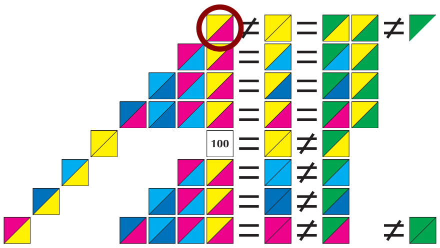
Look for this limit. Why? You want to know if net profit margin has leveled—steadily contributing income—but not a factor causing the increase or decrease of other measures. Or, is net profit margin changing—thus contributing to change in assets growth, which limits equity growth, revenue growth, income growth, and fair price growth?

You want increases in net profit margin to be caused by increasing income, not by decreasing revenue. Look at the middle chart and you'll see revenue (magenta) increasing, while income (yellow) is also generally increasing. Once net profit margin is relatively steady near its limit, any decrease in revenue will drag income down with it.

Look at the bottom chart to see that skyrocketing net profit margin is followed by skyrocketing share price—until informed investors, watching the *Share and Fair Price Trends* on page 77, plummet the price a few quarters before net profit margin goes into free fall. However, in the life of a company that is evolving toward excellence, net profit margin will rise until costs and competition cause it to level at far less than its mathematical maximum of 100% of revenue.

Professor Higgins insightfully relates profit margin and efficiency:

> Net profit margins differ greatly among industries depending on the nature of the products sold and the company's competitive strategy.... Companies with high profit margins tend to have low asset turns (efficiency), and vice versa. This is no accident. Companies that add significant value to a product ... *can* demand high profit margins. However, because adding value to a product usually requires lots of assets, these same firms tend to have lower asset turns.



GAAP Structure

$$\frac{\delta\,equity}{income} \times \frac{assets}{equity} \times \frac{revenue}{assets} \times \frac{income}{revenue} = \frac{\delta\,equity}{equity}$$

Net profit margin is a factor on 6 of 8 rows of equations. Net profit margin and *Efficiency—Revenue to Assets* on page 24 are the two most frequent factors affecting company results. This should motivate you to understand.

Net profit margin answers questions.

Are fundamentals of net profit margin (return on revenue) related to fundamentals of return on assets and return on equity? Yes, row 4 completes the rows 1, 2, 3, 4 sequence by revealing the fundamentals of net profit margin.

Does net profit margin help make a place in the matrix for *Equity to Revenue—Equity to Revenue* (blue over magenta) on page 28? Yes, *The Ratios Riddle* on page 105 proves the requirement for equity to revenue in the matrix. Only when you place equity to revenue in column 5, rows 4 and 8, can you cross-cancel related colors—to complete the matrix.

Is equity to revenue a factor of revenue growth on row 8? Yes. As an investor, you want to know the factors influencing revenue growth, because revenue growth drives all other growth in the company. Equity to revenue is one factor. Or, revenue growth can be simplified to net profit margin times *Revenue Change to Income* on page 42.

Net Profit Margin Events

Net profit margin (circled) and efficiency are the most frequent factors of equations in the matrix on the left—visually relating measures. Leave details of *GAAP Structure* on the left until page 87.

The Best Numbers Riddle on page 100 shows why you want the equity growth equation from row 7 of *GAAP Structure* to average greater than the *S&P* 11% average. Specifically, in the equation on the left, you want net profit margin to multiply the factors to its left, so equity growth beats *S&P* price growth.

Look at the equation on the left. You want it to average greater than 11% (Microsoft 1993–2005, 26%; Buffett 1965–2005, 22%). This happens only when the left four numbers multiply to greater than 11%. For example, say equity change to income is 0.5, leverage is 1, efficiency is 2, and net profit margin is 20%, then equity growth is 20%—which obviously beats 11% and is close to Buffett's 22%.

Look for events that may affect the company, like correlating the early 2000 *Federal Communications Commission* announcement—it would not approve a monopoly over broadband-to-the-home channels—with the following plummet of net profit margin.

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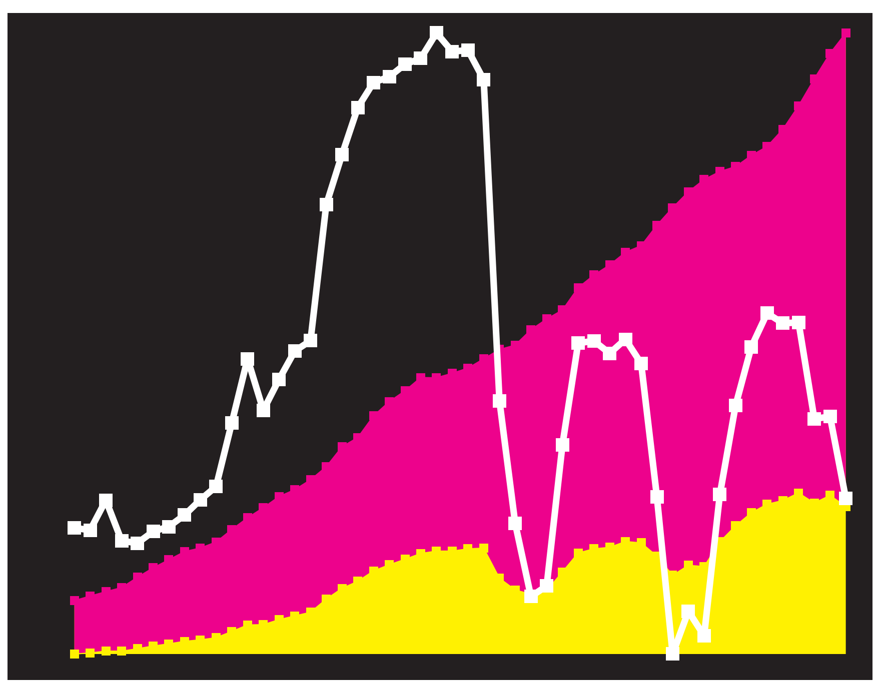

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