

MARKET COMMENTARY

EQUITY ANALYSIS



THE EARNINGS BOOM'S \$5 TRILLION TEST

The S&P 500's rise is supported by sharply higher earnings forecasts. But cash generation is not keeping pace, and the trillions being invested in AI must earn enough to justify the capital committed over time. That major test is still in front of us.

PROFITS, CASH, AND THE AI BOOM

This year the S&P 500 is up 12%, but investors are now paying less for a dollar of earnings (EPS) than at the start of the year. At December 31, the S&P 500 stood at 6,845, and now it sits near 7,686, for a 12% gain year to date. But the bigger jump has been the 28% gain in analysts' forecast earnings over the same period. How did we get a 28% earnings gain in eight months? We saw a 10% rise in anticipated sales coupled with a 16% gain in margins. A 10% increase in anticipated sales combined with a 16% improvement in margins produces roughly 28% earnings growth.

On the surface, this looks healthy. Investors are not paying higher multiples for earnings like they did in past booms. Earnings forecasts are rising much faster than the S&P 500 this year.

But there is another way to look at profitability. Earnings are an accounting measure; but over a long horizon, investors really own claims on cash.

LARGE AND GROWING CASH GAP

Please consider the chart on page 4. It shows how S&P 500 "earnings" relates to operating cash flow after removing capital expenditures. Over time, persistent earnings growth must be supported by cash generation. It simply takes time for capital investments to show returns, hence the gap. Today's gap is a record high. AI capital spending has risen rapidly since early 2024. It's now expected to exceed \$1.4 trillion in the next year, based on an estimate from S&P Global. Total AI capital spending is expected to reach trillions. This puts today's AI investments alongside other transformative technologies of the past like railroads, electrification, and the internet.

In short, earnings spread the cost of long-lived investments over time, while cash flow records the spending when it occurs. Over time, however, earnings must ultimately translate into cash if they are to create value for shareholders. And, on this score, we find that the S&P 500 appears much

cheaper when valued on earnings than when valued against the cash flow. With the S&P trading at 7,686, the forward earnings and cash flow yields are 5.2% and 3.8%, respectively.

But this does not tell us whether capital spending will, in the end, prove good or bad. For that, we must ask if the investments will generate a return high enough to justify the cost.

ECONOMIC PROFIT IS THE REAL TEST

The most important question is not how much companies are spending. We know the spending is already extremely large and getting larger. The most important question is whether the return on such investment compensates investors for time and risk.

A little "back of the envelope" math can show roughly how much annual cash flow would be needed to recover today's AI investment while earning an appropriate return. To do this, we need to answer three basic things: How much capital is being invested? What return is required to assume the risk? And what is the approximate life of the asset? None of these questions are knowable with precision, but we want to make reasonable guesses to judge order of magnitude, hence this is intentionally a simplified calculation. We know that, in reality, AI investment will occur over several years, asset lives will differ, and some assets will retain residual value. So, we are not trying to forecast AI economics precisely in this exercise, but to try and establish an approximate scale of cash generation required.

SOME ROUGH ASSUMPTIONS:

- **Capital investment:** McKinsey & Company estimates around \$5 trillion in investment during the first five years of the AI boom.* However, if demand accelerates, some estimates go as high as \$8 trillion. For this exercise, we will stick with the \$5 trillion figure.

- **Required Return:** The typical megacap hyperscaler has a cost of capital near 15% based on current Bloomberg estimates. These figures have risen from about 10% pre-AI boom as risk has risen. For this example, we will use a 12.5% midpoint assumption between the pre-AI boom estimate and the current one.
- **Asset Life:** We will assume a 5-year life for servers and GPUs and assume that heavy equipment such as power equipment will have a 10-year life. For simplicity, we will also assume that the total cost of a datacenter includes only the equipment and not the long-lasting real estate costs. All in, we will assume the average usable life of equipment, servers, GPUs, and the like is about 7.5 years (average of the server/GPU and power equipment useful lives). Moreover, we treat the \$5 trillion buildout as a single pool of capital with an average 7.5-year economic life, although we know this is a moving target.

Finally, we will use these rough estimates in a formula. This will show us how much annual cash flow we need to recover the original investment and provide a return that covers opportunity cost and risk. That formula, called a capital recovery factor (CRF), is equal to:

$$\text{CRF} = \frac{r(1+r)^n}{(1+r)^n - 1}$$

Where “*r*” is the required return or cost of capital and “*n*” is the investment’s life.

When we plug in our assumptions about return and asset life into our formula, we get a “capital recovery factor” of about 21%. We need to find out how much annual cash is required for a sufficient recovery and return on investment. To do this, we multiply our initial investment of \$5 trillion by

21%. This gives us a necessary annual cash flow estimate of just over \$1 trillion. At a hypothetical 50% cash-flow margin, that would require roughly \$2.1 trillion of annual revenue. If we assume a 40% margin, revenue will need to be \$2.7 trillion and if we assume a 60% margin, revenue would need to be \$1.8 trillion. The profitability of the investments is another major swing factor and unknowable at this time.

To put roughly \$2 trillion of revenue in perspective, consider that total revenue for S&P 500 companies is roughly \$20 trillion. Thus, AI revenue might need to land somewhere near 10% of today’s total S&P 500 revenue figure, give or take.

CONCLUSION

Earnings are soaring, with S&P 500 profit forecasts up 28% this year. At the same time, companies are engaged in a historic capital-investment boom centered on AI. Cash generation is not keeping pace, creating an unusually large gap between reported profits and post-investment cash flow.

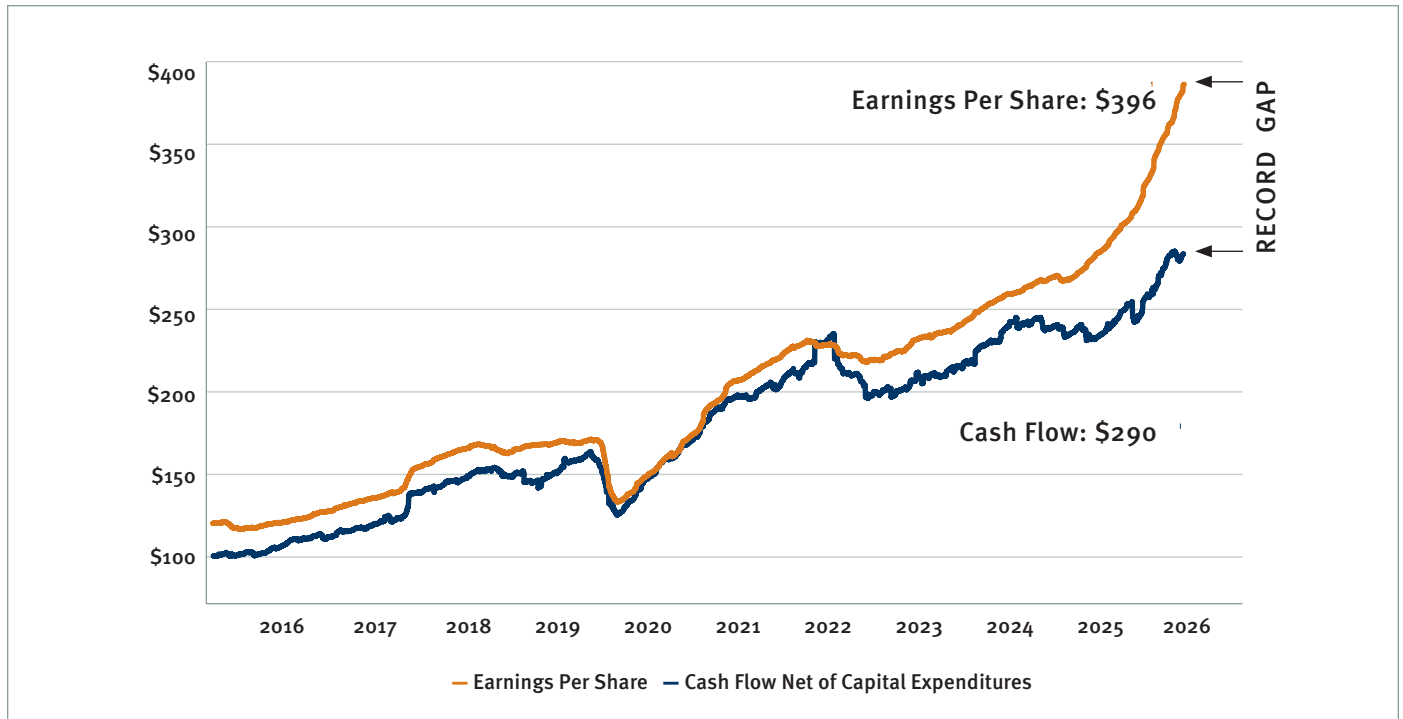
That does not make the investment bad. Railroads, electrification, and the internet all required enormous amounts of up-front capital before producing transformative economic gains. But technological success and investment success are not the same thing. Capital must first be recovered, and investors must be compensated for the time and risk involved in providing it.

AI can transform the economy over the long term and still disappoint investors. And there can be a different set of short-run and long-run winners and losers. The ultimate test will not be whether the technology works—or even whether it generates enormous revenue. The test is whether that revenue produces enough cash to recover the trillions invested and earn a return above the cost of the capital used to build it.

**McKinsey Quarterly: The cost of compute: A \$7T race to scale data centers.*

CHART A | THE S&P 500 EARNINGS vs. CASH FLOW GAP STANDS AT RECORD LEVELS

Source: WCA, Bloomberg



IMPORTANT DISCLOSURES

Beta is a measure of the volatility, or systematic risk, of a security or a portfolio relative to the market as a whole. A beta of one is considered as risky as the benchmark and is therefore likely to provide expected returns approximate to those of the benchmark during both up and down periods. A portfolio with a beta of two would move approximately twice as much as the benchmark.

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