

Interpreting signals
from the global economy
and financial markets

Decoder



Editor: Thijs Knaap | thijs.knaap@apg-am.nl

In Focus

- We discussed historical excess returns for equity last week. Using an average of these as expected ERP would be a mistake.
- Rather, we split the expected return to equity into components and observe mean reversion in two of them.
- This allows us to forecast returns in a consistent framework. From current levels, we expect lower-than-equilibrium returns, with the loss representing about 2.5 years' worth of ERP.

Equity risk premium (2) – expected returns

Holders of equity expect a return in excess of the safe rate, to compensate for the risks of holding the asset. Last week [we confirmed](#) that historically, they did indeed get compensated, if not always, at least on average. It is tempting, but probably not correct, to use the historical average excess return as an estimate for the expected equity risk premium (ERP) in future periods. In this second Decoder on the topic, we explore a number of other methods for working out the expected ERP and present our own estimate.

Financial journalists seemingly never tire of reminding us that “bond prices move inversely to yields”. This means that if a bond becomes more expensive, its owners can clock a nice return today, but also must reckon with lower expected returns in the future. This is eminently sensible, given that the total payoff at the bond’s expiration is given.

If we estimate the equity risk premium from its historical average, there is a risk of ignoring the journalists’ warning. Higher returns in the past have the potential to lower them in the future, to the degree that equities resemble bonds; that is, in those cases where the price of the asset changes but the expected future income does not.

At the risk of stating the obvious, equities do not always resemble bonds. If a company finds a way to increase its profitability, expected future income to shareholders goes up, and there is no need for the subsequent share price increase to move inversely to future returns. But sometimes it does. Given the risk of drawing exactly the wrong conclusion from price moves, it’s better to be more specific about where we expect future equity returns to come from.

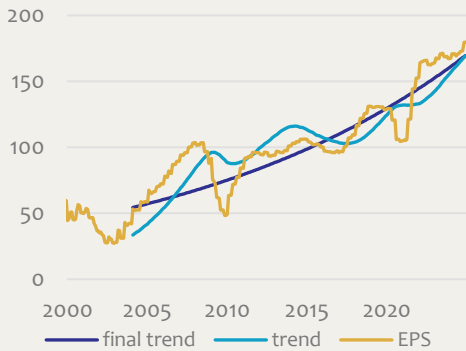
Not like the weather forecast

Future returns can come from three sources: income, growth in income and valuation changes. In the case of equities, that means dividends, EPS (earnings per



In Figures

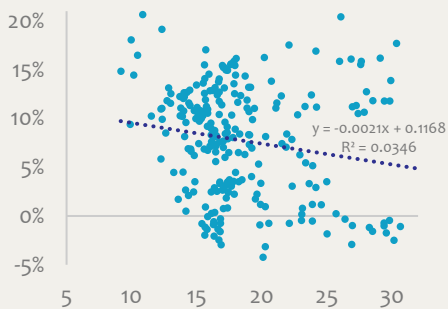
(Trend) earnings for the MSCI World



Earnings per share (EPS) for the MSCI World equity index are represented in yellow. These are average earnings over the 12 months preceding. The light blue line (“trend”) shows an estimate of the trend level at each date, based on the previous 120 months of data. The dark line is the trend as it is estimated in December 2024.

Data: Bloomberg, APG AM

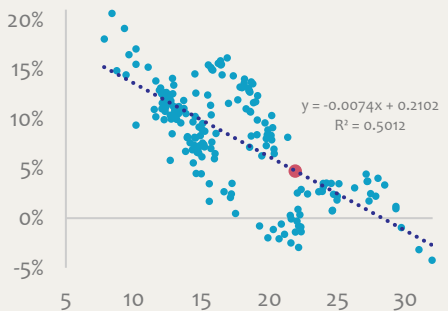
P/E not that helpful for future returns



For each month from 2004 to 2019, this graph plots the price of the MSCI World divided EPS on the horizontal axis, and subsequent 5-year average returns on the vertical axis.

Data: Bloomberg, APG AM.

P/ trend E and subsequent returns



For each month from 2004 to 2019, this graph plots the price of the MSCI divided by trend EPS (from the graph above) on the horizontal axis, and subsequent 5-year average returns on the vertical axis. The current P/trend E and its fitted expected return is shown by the red dot.

Data: Bloomberg, APG AM.

share, or “profit”) growth and changes in the way that equity markets value profits. In last week’s Decoder, we noted the volatility of equity returns. This is due to volatility in EPS and – chiefly – valuation.

In a [provocative article](#), Rob Arnott of Research Associates claims that there is mean reversion in those two factors: periods of high or low profit growth ultimately lead to a return to trend, and the same is true of high or low valuations—where the trend is for slightly higher valuation over time, due to developments in the economy. This mean reversion plays out over longer periods, so that estimates of the ERP have the opposite problem that weather forecasters have: in the stock market, predicting tomorrow’s developments is close to impossible, but it gets easier if you want to forecast longer periods.

Finding a trend in profits

Do profits and valuations in fact return to a trend? And if so, what trend? For EPS, it is relatively easy to draw a line of constant growth through the ups and downs in the time series once you have all the data; it is also of limited use in a practical sense, because waiting for all the data to come in means you cannot make use of your model until it is too late. In the top graph on the left, we show EPS over time and a moving estimate of their trend level based on available data at the time. This estimate fits an exponential curve to the last 120 months of EPS. As an example, the fitted curve for December 2024 is also drawn.

“

EPS are above trend by some 6 percent

The graph shows us that EPS have grown rapidly since they dipped during the COVID crisis. However, now that four years have passed since that dip, we must also increase our estimate of the trend—the light blue line curves upward near the end. Even with this increased estimate of the trend, EPS are above trend by some 6 percent.

Is this trend a useful number? Looking at the top graph this is not immediately clear: for long periods the trend is catching up to profits, rather than the other way around (in 2004-08 and 2014-17 for instance, and arguably the most recent period as well). But we find a use for the trend in earnings if we combine it with the price of the equity index to create an alternative measure of valuation.

P over trend E

The conventional valuation measure in equity markets divides the price by the most recent 12-month earnings figure. By this measure, investors are paying 20.7 times the profit for the MSCI World index. Is this a lot? If you plot P/E against the returns that follow in the years after, it seems to offer very little information (middle graph).

This is where our trend earnings come in useful. If earnings return to trend, we should not use the part that is away from trend in the valuation – as it will prove fleeting in the years that follow. The bottom graph on the left plots P/ trend E for each month between 2004 and 2019 as a dot, with the subsequent five-year return on the vertical axis. There are a lot of overlapping periods in the cloud of dots that follows, but even so, the relationship is both strong and intuitively appealing: when equities are expensive, returns in the years that follow are lower. Our current starting position is indicated with the red dot at a P/trend E of 21.7. Note that it is higher than normal P/E as E is above trend. Purely based on the fitted line, the estimate for your expected equity return in 2025-30 would be 4.8 percent. Obviously, this is an average. You cannot ‘expect’ it in the sense that historically, more often than not, returns have deviated from this expected return measure by more than 1%. After all, the premium compensates for risk on average, but the risk remains.



“

Should we take account of the Trump economic program? Geopolitics? Climate change?

Taking account of the rest of the economy

When we put together expected returns, we want to take account of this valuation measure. But we must also make sure our forecasts paint a consistent picture of the whole economy. The fitted return number in the bottom graph does not take account of our assumptions on growth, inflation and interest rates. The companies that will have to generate the profits that turn in to equity returns, however, will be very much affected by those conditions. And the valuation of those profits cannot be independent of rates and the equity risk premium that investors desire.

To start with the latter, in our economic assumptions we have been using an ERP of 3½ percent over cash for long-run projections. This number is low compared to the (conceptually similar) average realized premium over bills that we quoted last week, where the average for American markets was 6 percent.

We also learned, however, that the US had an extraordinary 20th century. Using a larger sample, a premium of 2.7 percent over bonds would be closer to the historical average. The difference between bonds and bills returns was large in the 20th century, due to the relentless decline in rates after World War II. We expect the difference to be closer to 0.5 percent in the future, due to the lower starting point and the generally flatter curves. The historical average equity risk premium then translates into 3.2 percent over bills, fairly close to our ERP. This average holds in the long run.

We use the ERP of 3½ percent, together with our assumptions on rates, growth and inflation in a Gordon growth model to find an equilibrium P/E of 19.9. Compare that to the current P/trend E of 21.7 and we find that valuation returning to trend will take some 8 percent from steady-state returns in the coming years. This will eat up the normal ERP for some 2.5 years. This is not necessarily a smooth process.

Taking account of the rest of the world

In setting expected returns, we use valuation, the profits cycle and our general assumptions about the economy. But shouldn't we take in more than those staid, financial, statistics? Optimism around AI is surely a factor in the current equity market – does it not deserve a place in our analysis? And how do we take account of the Trump economic program? Geopolitics? Climate change?

One answer is that we cannot process any of these developments better than the market can, and so we should not go outside market parameters for our expected returns, even in the presence of all of these developments. We expect to be compensated for our uncertainty about returns by the equity risk premium, just as investors in the (equally eventful) 20th and 19th centuries were.

But we need not be blind to the themes of the day. To investigate the effects of one possible development across assets, we can turn to deterministic scenarios. In each scenario we flesh out the implications for equity and other asset classes. We have them for geopolitical risk, inflation, stagnation and breakthrough AI. Looking at all assets in different circumstances reveals that there are situations where equity is the best of a bad bunch, or is one of the few categories that captures upside risks. This illustrates that we should look at the distribution of returns as well as the average.

Disclaimer

The views and opinions in this document may be subject to changes at any given time. This material is offered to you for information purposes and is not meant as professional investment advice. See all previous Decoders on the [TeamAPG](#) site.