



# Earnings surprise

Its critical role in equity markets and factor investing

Ram Rasaratnam

**E**arnings growth performance relative to expectations is arguably more important than the growth itself. A factor framework that identifies patterns of return can play an important role for equity investors. While different factors tend to be rewarded at different stages of the economic cycle, earnings surprise plays a significant part in explaining their returns.

US investor and professor [and “father of value investing”] Benjamin Graham once famously said, “In the short run the stock market is a voting machine but in the long run it is a weighing machine.”

Certainly, sentiment can be a powerful driver of short-term stock market returns. But ultimately what truly matters over the long term—*what actually gets weighed*—are fundamentals such as book value, cash flow—and specifically, earnings.

It is right to focus on company earnings of course, but the level of delivered earnings growth is less important to the market than any actual surprise in growth—the amount by which a company surpasses, or disappoints, relative to expectations.

Fundamentally, we strongly believe in the importance of earnings surprises—analysis of which can help explain stock returns and, as such, it is a vital area which investors should pay attention to.

## What is earnings surprise?

Brokers hire a great many analysts to write and publish detailed cor-

porate earnings forecasts. These individual forecasts are combined to create consensus estimates on what a company is expected to earn—usually over the coming 12 months.

Compare this forecast to the level of earnings a company subsequently delivers, and the difference is the delivered earnings surprise.

In Figure 1 on the next page, we look at how these measures of earnings growth and earnings surprise relate to a specific stock, in this case Apple. We can see analysts have consistently expected the technology giant to deliver earnings growth (top chart) and that the company has also consistently delivered growth higher than those expectations.

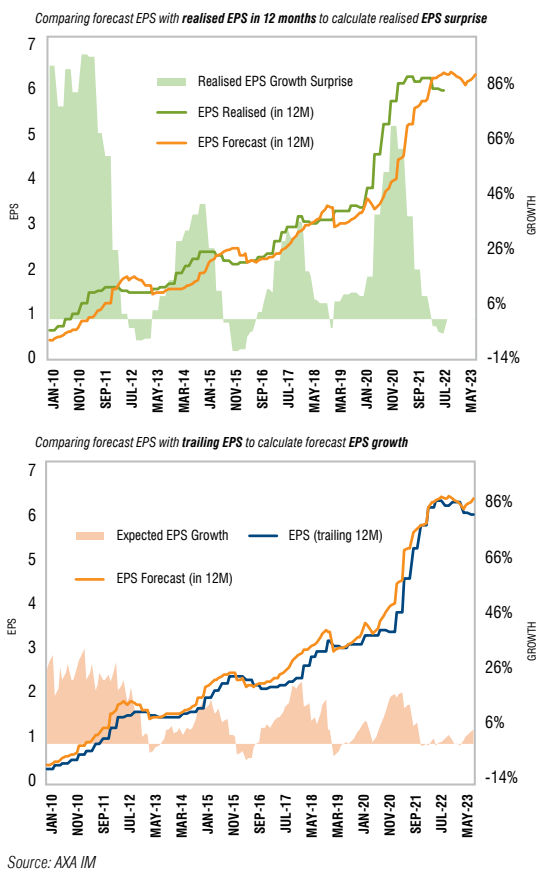
In Figure 2 on the next page, we show two measures of growth for the overall global market—realised earnings growth and earnings surprise. The key takeaway from Figure 2 is that, on average, the market in aggregate has delivered negative earnings surprise.

A way of interpreting this observation is that the consensus expectation of future growth is too optimistic—on average, when stocks report their earnings, they disappoint (they deliver a negative earnings surprise) relative to expectations.

## If you could predict one thing, make it earnings surprise

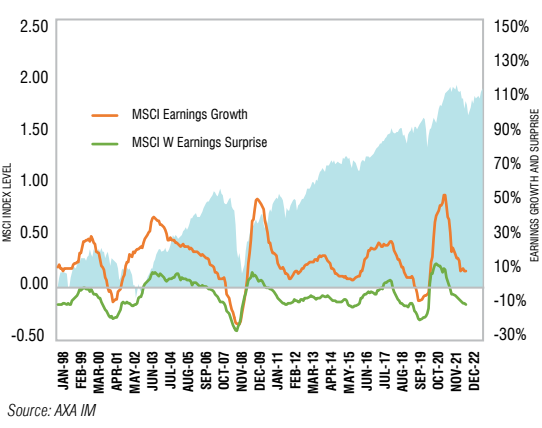
It is vital for investors in equity markets to understand the relationship between returns and three measures of earnings growth: expected growth, realised growth and earnings growth surprise.

**Figure 1. Forecast earnings growth and earnings surprise for Apple Inc.**



Source: AXA IM

**Figure 2. Realised earnings growth and earnings surprise for overall global market**



Source: AXA IM

To make this assessment, we conduct a back-test. Each month, we split the universe into five equally sized buckets, based on a measure of growth. We then measure the returns of stocks in that basket. By analysing the results of this back-test we can make an assessment of the measure to see if it can predict future returns.

Figure 3 shows expected growth is not predictive of

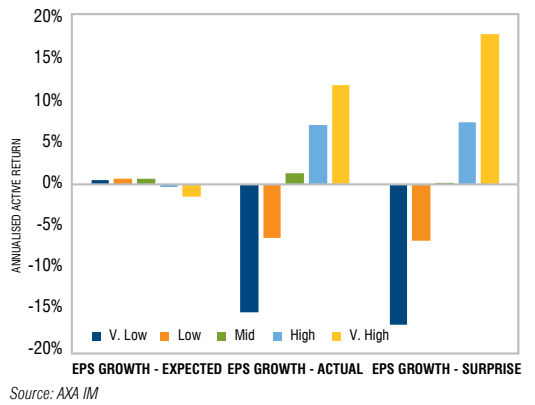
future returns. This is a surprising result—companies with the highest level of expected growth have actually underperformed on average.

The next two measures utilise a so-called ‘perfect foresight’ technique. Perfect foresight refers to a hypothetical ability to make predictions with complete and accurate knowledge of all future outcomes. In this case, it assumes we will know today the earnings per share (EPS) all companies will deliver in 12 months’ time.

We use this technique to look ahead 12 months to rank companies on the level of realised growth they deliver in earnings and earnings surprise, then measure the hypothetical return if the stock was bought today.

As expected, stocks which deliver very high growth are well rewarded, but names that deliver very high EPS growth surprise deliver even better returns. It is important to note that within the group of companies delivering high earnings surprise, there exists a wide range of delivered earnings growth. It includes companies that deliver low levels of earnings growth. As such, if we could predict only one thing it should be earnings surprise.

**Figure 3. MSCI World: Last 25.6 years**



Source: AXA IM

### The interaction of earnings growth and earnings surprise

Figure 3 makes it clear how the market rewards realised surprise more than realised growth. But what happens when we look at the relationship between realised growth and realised surprise? Table 1 shows the annualised excess return of combinations of realised earnings surprise and realised earnings growth. Perhaps unsurprisingly, the best-rewarded segment of the market is those stocks that deliver very high growth and very high surprise.

But what is more interesting is the observation that companies that deliver very low earnings growth, but beat expectations, (bottom-right quadrant) outperform.

In the opposite side of the grid, companies that deliver very high growth, but are below expectations, will underperform the market. Earnings surprise is consistently rewarded by the market, but earnings growth is not.



**Ram Rasaratnam, AXA Investment Managers**

Ram is the chief investment officer for AXA IM Equity QI, responsible for the modelling and design of its quantitative investment strategies. He has held several positions within AXA IM’s research and portfolio management teams, including director of research, Asia. Previously, he was a quantitative research associate at Citigroup Asset Management in London. Ram is a CFA charterholder.

Table 1. MSCI World: June 2003 to December 2022

		Annualised active return					
		Very low	Low	Mid	High	Very high	
Realised growth	Very high	-7.5%	3.1%	8.9%	9.7%	22.8%	12.9%
	High	-7.9%	-1.6%	1.8%	10.1%	17.2%	8.0%
	Mid	-9.4%	-6.7%	-0.7%	8.7%	14.5%	1.8%
	Low	-15.9%	-10.0%	-1.9%	4.4%	9.4%	-6.3%
	Very Low	-20.9%	-9.2%	-2.4%	-0.4%	4.9%	-15.6%
		-17.1%	-6.6%	0.7%	8.3%	19.4%	

		Average number of names					
		Very low	Low	Mid	High	Very high	
Realised growth	Very high	37	38	42	47	156	319
	High	26	32	45	92	90	283
	Mid	26	52	87	84	31	277
	Low	54	106	76	41	19	294
	Very Low	205	71	31	20	11	338
		344	295	278	280	302	1572

Source: AXA IM

### Expected growth and realised surprise from a sector perspective

Another important observation can be made when we look at growth and surprise by industry (Figure 4). We can see that technology has consistently had high expectations of earnings growth relative to the overall market, and that consumer staples stocks have lower levels of growth.

What is important to note is that earnings surprise exists—and is well distributed—across all sectors. This observation makes the case for building well-diversified equity portfolios that have exposure to all market sectors. An investor looking to capture pure growth may need to have more industry concentration, but an investor looking for earnings surprise needs diversification.

### What does earnings surprise mean to a factor investor?

Many investors take a ‘factor’ approach to investing—and we believe that earnings surprise is an often-overlooked part of factor investing that can have an important impact on investor returns.

Factor investing is a way of identifying and classifying the common characteristics of companies that have delivered certain patterns of return. These patterns can potentially provide insight into how stocks could be expected to perform in the future—and we believe a factor framework can play an important part of an equity investor’s approach.

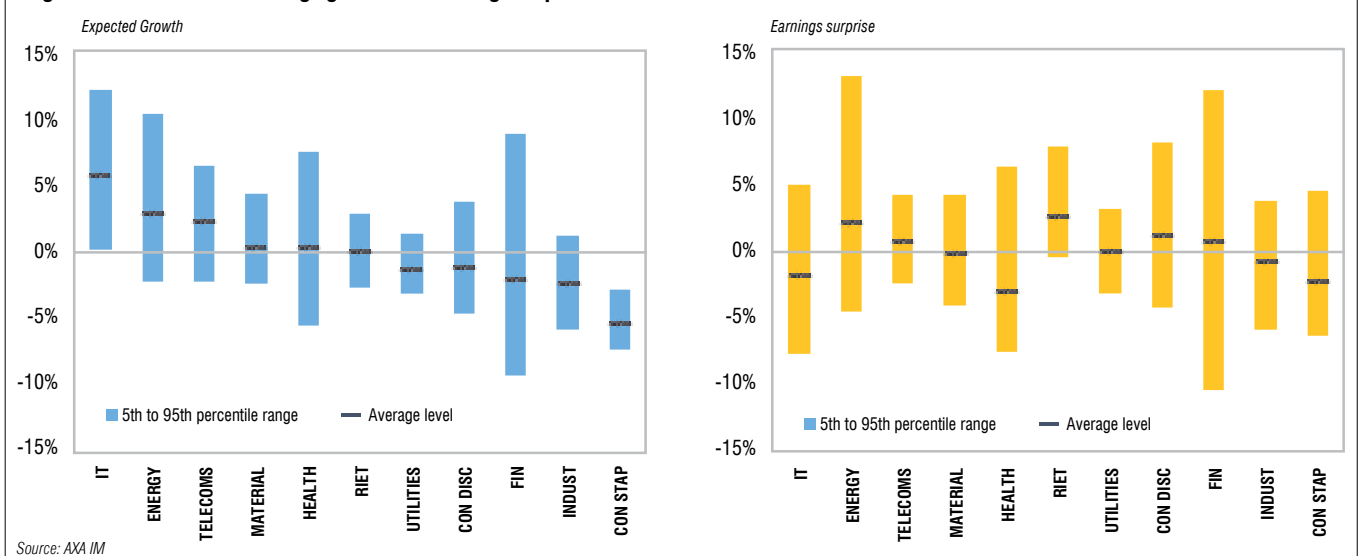
Some of the most common and widely used factors by investors are: value, quality, growth, momentum, and low volatility—asset managers can create their own definitions and models of each one.

We broadly define factors as follows:

- **Value:** Companies with a stock price which is relatively inexpensive compared to fundamentals, such as price-to-earnings, price-to-book value and dividend.
- **Quality:** Companies which have attractive levels of profitability (such as return on equity). Quality measures can also incorporate balance sheet information and measure the stability of earnings delivery.
- **Growth:** Companies with high historical and/or expected levels of future sales or earnings growth, typically measured over a multi-year horizon.
- **Momentum:** Companies which have had a positive price change relative to the market, typically measured over the previous 12 months. Momentum factors can also incorporate changes in earnings expectations.
- **Low volatility:** Companies with stock prices that are relatively less sensitive to market moves (i.e. their stock beta, and/or idiosyncratic risk is lower than the market).

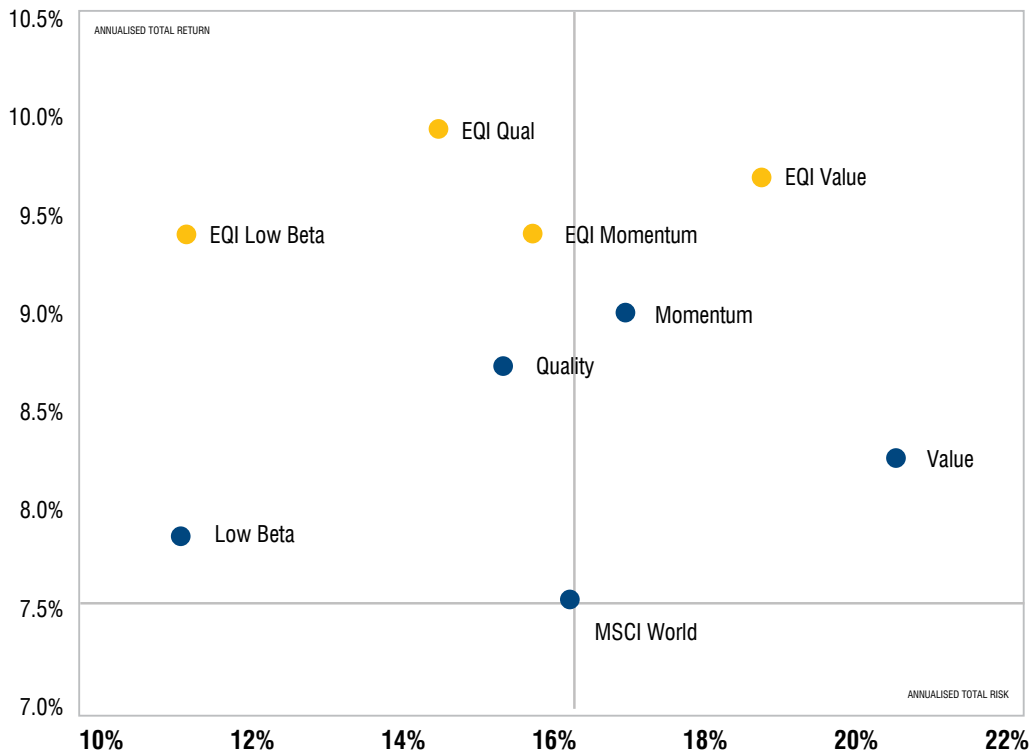
The reason why some equity investors, particularly quantitative investors, pay attention to factors is because over the long term each has delivered a premium return to the overall market, albeit with different levels of risk.

Figure 4. Distribution of earnings growth and earnings surprise over various sectors



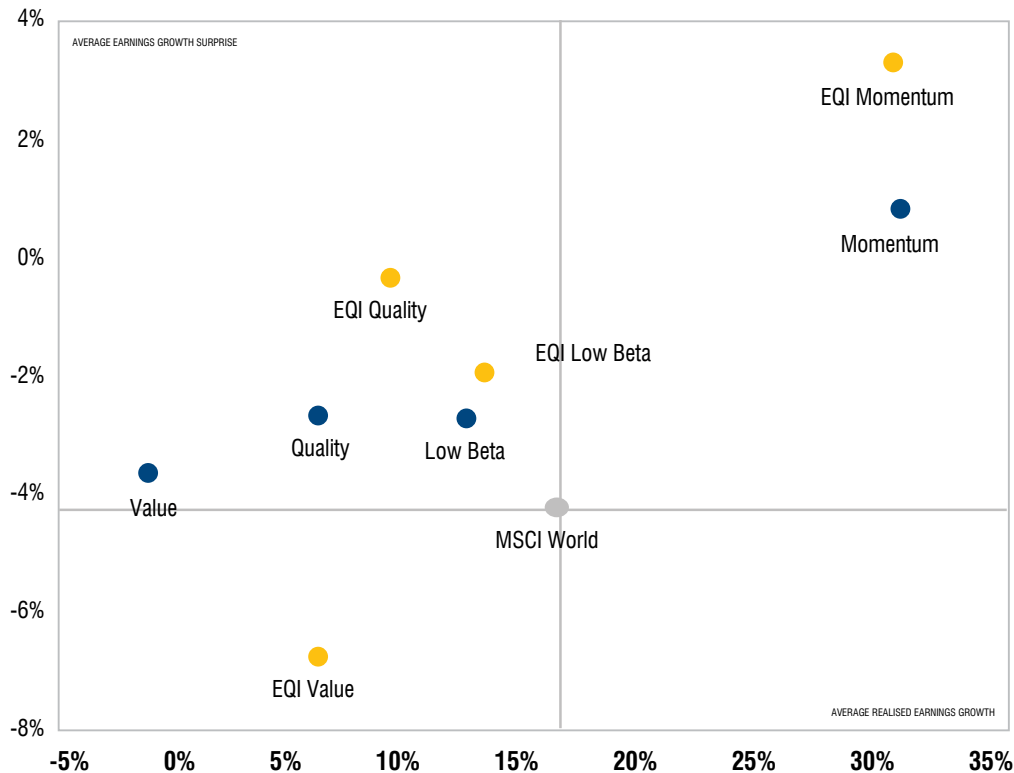
Source: AXA IM

Figure 5. Global factors: Risk-return outcomes, January 1998 to July 2023



Source: AXA IM

Figure 6. Global factors: Realised growth outcomes, January 1998 to July 2022



Source: AXA IM

**The quote**

*The level of delivered earnings growth is less important to the market than any actual surprise in growth.*

Figure 5 on the preceding page shows the risk and return profile of the most attractive 20% of stocks in the MSCI World Index ranked by the standard or ‘simple’ factor definitions as well as AXA IM’s proprietary factor definition—equity quant investing (EQI).

Taking the simple factors first (blue dots), we see that over the long term they all have a return premium associated with them. The chart also shows our proprietary factor definitions (yellow dots) have been able to deliver significant improvements in return while lowering risk.

We now look at simple and proprietary factor outcomes through the prism of earnings growth. There are several key takeaways from Figure 6 on the preceding page. Momentum is the only factor that delivers better earnings growth than the market. All simple factors deliver better earnings surprise.

An interesting point to note is our proprietary value factor delivers better growth but less surprise than simple value. Although earnings surprise plays an important part in explaining factor returns, it is not all-encompassing and is not the only dimension to consider when aiming to improve investment outcomes.

**Fundamentals drive returns**

We believe the impact of earnings growth and surprise should be a strong consideration when designing stock selection models for any equity investor. This is something that should not be overlooked by factor investors, as regardless of industry sector, all factors have the potential for earnings surprise.

Ultimately it all comes down to one thing—fundamentals drive equity returns in the long run. Earnings growth is important, but earnings surprise is eminent. **FS**