PREDICTING THE EARNING SURPRISE

By Dr Heiko Bailer, Portfolio Manager at GL Asset Management AG

US listed companies announce their Earnings Per Share (EPS) towards the end of every quarter and financial analysts try to predict this EPS estimate before the announcement event. The difference between the average of all analyst predictions and the actually announced EPS is called the earnings surprise. Typically, a positive earnings surprise lifts the stock price. A number of research papers have evaluated the impact of the earning surprise on the stock price over various horizons after the announcement. In contrast, in an upcoming series of articles, we will analyse the impact of analyst earning predictions on the stock price during the days leading up to the earnings event.

Previous research finds that information asymmetry increases before earnings event (some traders seem to know more than others, hence the market is not efficient). For example, bid-ask spreads increase while quoted depths decrease, Lee, Mucklow & Ready (1993)*, or trading volume decreases Chae (2005), or information asymmetry is larger before negative earnings surprises, Park, Lee & Song (2013), or the more ahead of time the company announces the announcement date, the higher the earning surprise, Boulland & Dessaint (2015).

This article evaluates if stock returns pre-event date can predict the earnings surprises (post-event) for 1’249 of the most liquid US stocks since 2005.

Figure 1** shows that, for all 1’249 stocks, there is a positive correlation between the 3-day pre-event to the 1-day post-event returns. The green shaded area includes a “no-event” impact band of +/- 3%. Outside the shaded area only 24.3% of the events had a large adverse impact – e.g., the 3-day pre-event return was positive but the 1-day post-event negative more than -3%.

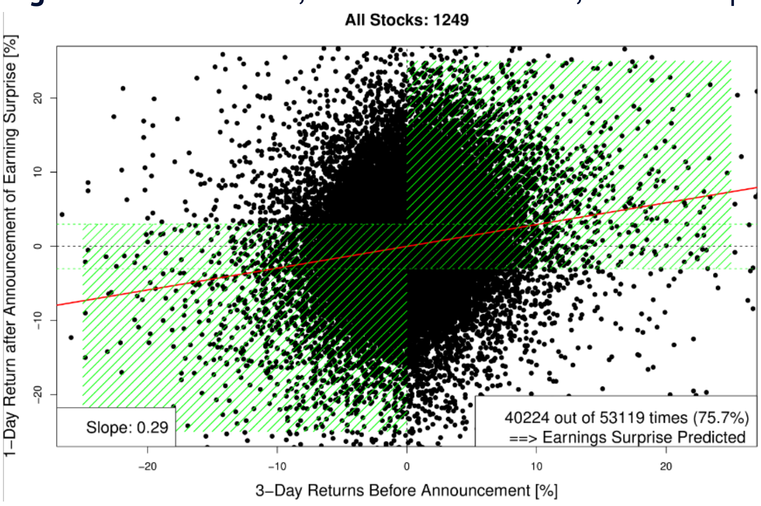

Figure 1

* References: For space reason, the references are provided upon request

** Graphs showing all industries for 3-day, 5-day, and 7-day pre-event returns are available upon request

On an industry level, there is a wide spread that indicates various degrees of industry specific predictability.

Figure 2 shows that for REITs pre-event returns have a high predictability of post-event returns. Only a few events where large post-events have had large pre-event opposite returns.

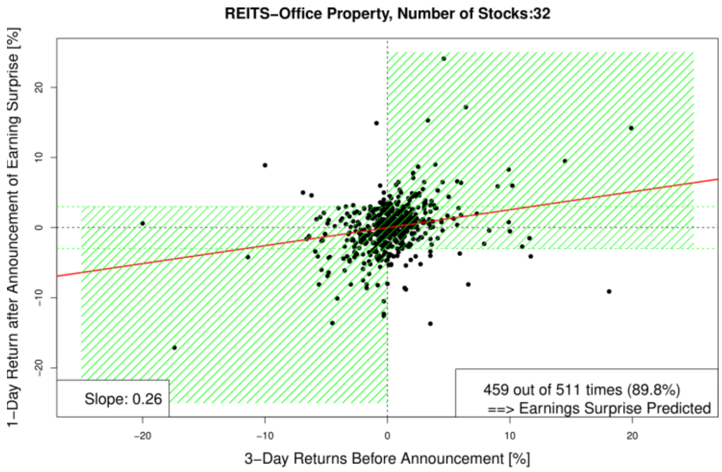

Figure 2

An example for less predictability is the industry Electronic Equipment and Instruments, as shown in **Figure 3**. Pre-event returns tend to be smaller – an indication of less trading activity before the event, and reduced predictability of post-event returns.

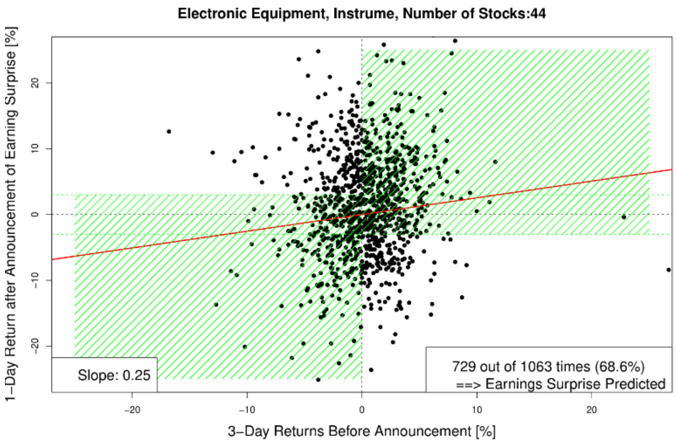

Figure 3

Conclusion: Being aware of the predictability of post-event returns can help with the decision to keep a stock (long or short) in the portfolio during the announcement date or not.

The next article will add further measures to this analysis, such as trading volumes and other liquidity

Dr Heiko Bailer

GL Asset Management AG, Portfolio Manager

Dr Heiko Bailer Biography

Heiko Bailer joined GL Asset Management in November 2016. Prior to that, he worked for various investment companies including Credit Suisse, Bank Vontobel (Harcourt), ABN AMRO, Deutsche Bank in Zurich, London, Tokyo, and New York.

Heiko Bailer's approach is quantitative, systematic, and based on his Ph.D. research in robust statistics - parts of his Ph.D. were recently published in The Oxford Handbook of Quantitative Asset Management (2012).

He has a Ph.D. in Statistics (applied Finance) as well as a degree in Computational Finance from the University of Washington, USA and a Master of Science in Mathematics and Physics from the Ludwig-Maximilians University of Munich, Germany.