

I Read the News Today, Oh Boy

Stockholm (HedgeNordic) – Advertising has a long-term dynamic – often imperceptible to the naked eye – effect on consumer behavior. Most of us are influenced by advertisements without even realizing. The constant stream of financial news acts on investors like advertising acts on consumers. Dimitri Kroujiline and Maxim Gusev of alternative investment specialist LGT Capital Partners used this analogy as the foundation of a strategy that relies on news as the only input to derive investor sentiment and trade across various futures markets.

“This insight was important because it meant that we could apply advertising research methods to identify news that influence investors strongly,” explains Product Specialist Stefano Lecchini (*pictured*). The **LGT AI News-Based Trading** strategy, which earlier this week received an award at the 2020 HFM European Quant Awards along with two other vehicles under the umbrella of LGT Capital Partners, uses “news as the raw material for deriving trading signals.” The architects of the strategy realized that one “could score news in a meaningful way and use this information to trade the stock market,” according to Lecchini.

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“The idea is to transform news into a number,” Lecchini explains one of the first steps in the process of generating trading signals. The LGT AI News-Based Trading strategy downloads and processes tens of thousands of news from hundreds of news outlets every ten minutes. “The strategy processes news that have some direct link to or impact on the development of financial markets and economies,” says Lecchini. “Any piece of news in language form on various channels, Tweets, a title on a newspaper, a Bloomberg line and so on.”

To transform news into a number, the team running the strategy scores the processed news using a high-precision proprietary NLP algorithm that assigns a semantic value of one, zero or minus one to each piece of news depending on whether the news is positive, neutral or negative in respect to financial markets’ outlook. The aggregation of all these values creates a “very noisy curve out of which is very difficult to extract any sensible information,” according to Lecchini. The curve is oscillating between plus one and minus one on a daily basis in a hectic way, “which shows that the investor community is quite hysteric.”

From News Scoring to Deriving Sentiment

“News scoring is only the first step of the trading signal generation,” points out Lecchini, who is a Principal at LGT Capital Partners focusing on developing tailor-made hedge fund solutions for institutional clients. “Making an investment decision is a complex process, influenced not only by today’s news but also by news events in the past as well as by information disseminated via other channels, such as exchange of opinions. The team is acknowledging the linear and most intuitive type of relationship that we observe between news and market reactions in the short-term,” asserts Lecchini. “In the timeframe of minutes and hours, we know that positive news tends to have a positive impact on the markets, while bad news tend to have a negative impact on market prices.”

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However, there is a more long-lasting non-linear impact of news on the market, according to Lecchini. This longer-term memory of past news in market prices is attributable to a feedback mechanism acting over different time horizons. “This longer-term impact is unfolding based on a non-linear type of dynamic,” he elaborates. The team plugs the aggregated scored news into a non-linear dynamic model, developed using ideas from physics, to calculate investor sentiment over multiple horizons. “The main distinctive characteristic is that the strategy is trying not only to capture these intra-day, linear and very intuitive relationships between news and market prices, but is also trying to capture the more subtle yet significant and essential impact news have on markets beyond these.”

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“Finally, in the so obtained multi-dimensional news and sentiment spaces machine learning algorithms derive return forecasts and generate trading signals,” further explains Lecchini. In short, “the way the team is translating news into a trading signal is based on a model that aims at describing how investor sentiment is evolving over time.” The net market exposure maintained by the LGT AI News-Based Trading strategy, however, “varies dynamically depending on the timescale of the sentiment that dominates the investment landscape at the time,” according to Lecchini. “If a short-term sentiment is dominant, the exposure may change from full allocation to cash or vice versa in a day or two,” he continues. “If a long-term sentiment becomes important, the strategy will build up or scale down its positions over many days.”

Same Story for Different Markets

The LGT AI News-Based Trading strategy then takes corresponding positions via futures across various equity markets depending on sentiment dynamics. “News-based equity trading is the core strategy,” emphasizes Lecchini. The equity strategy, which represents the core engine of the fund, “contains an array of independent signals that anticipate market movements in different equity markets over a 1-2 week-horizon and adjust daily the long/short exposure in equity index futures,” according to Lecchini.

The strategy currently trades futures providing exposure to stock markets in the United States, Japan, the United Kingdom, France, Switzerland, Germany and the Netherlands. “By the end of this year, we expect to add the news-based trading signals for Canada, Australia and Hong Kong, at which point this strategy will cover the top ten developed equity markets in the MSCI World Index,”

says Lecchini. The team running the strategy “observed correlation patterns across markets in terms of sentiment, an observation that we have a first intuition ourselves,” asserts Lecchini. “The overall sentiment is mostly shaped by global news, but you can find differentiating elements on a regional basis as well, which increases portfolio diversification.”

While “the core equity trading strategy comprises over 90 percent of the overall risk budget,” the LGT AI News-Based Trading Fund also employs two other strategies – VIX and safe-haven, which also rely on news as the only input. “The VIX strategy adds value during turbulent times,” explains Lecchini. “In particular, it helps in those fast-developing adverse market situations where long-term sentiment is still insufficiently low to permit the core equity strategy to start reducing market exposure.” The safe-haven strategy, meanwhile, “is activated only during bear markets to strengthen the protection of the strategy and make the overall portfolio more robust.” The objective of the safe-haven strategy is to increase resilience in adverse market events.

Shining in Good and Bad Environments

Unlike many other investment vehicles and asset classes, the LGT AI News-Based Trading strategy performed well both in the turbulent market conditions of the first quarter and in the subsequent recovery that followed. The fund was flat-to-marginally positive in the first quarter and gained over 34 percent year-to-date through the end of September.

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“Starting into the year, January and early February, we saw a deterioration of sentiment that was observable before being reflected in market prices,” Lecchini tells HedgeNordic. “In early January, the news-based system determined that the market was getting overbought and began to reduce exposure, expecting a sharp drawdown.” As a result, “the strategy entered the COVID-19 crash in mid-February and March in risk-neutral state, and thereby, clearly could protect the downside quite well,” according to Lecchini.

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“The system was able to capture investor sentiment from financial news better than the majority of price-based strategies and implement its sentiment-driven “views” via a dynamic exposure allocation,” reckons Lecchini. “The system also switched off the correction indicators rather quickly and began trading the market rebound by mid-April.” Explaining how the news-based strategy managed to capture a recovery in investor sentiment following March, Lecchini says that “by analyzing the aggregate of news, the system might have recognized less pessimistic news, not so dramatic representations of the crisis as compared to March, when there was no visibility on the future in the middle of the crisis.”

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The rapid and sudden recovery in market prices helped the strategy capture the subsequent recovery, too. “This feedback loop between market prices, news and investor sentiment was captured by the system. When prices and markets are recovering, this is suggesting there is something positive going on,” explains Lecchini. “In sum, the strategy showed an agile profile that allowed it to perform in a difficult, fast-paced market environment.”