



Greedy or fearful: Is investor's sentiment at a turning point?

A short overview of "Fear & Greed" - Factors on the European Stock Market

BY VEIT ETZOLD AND PASCAL STAIGER

How can one explain the increasing willingness to take risks during the latest bull market we are in? This article intends to implement an investor sentiment, comparable to CNNs "Fear&Greed Index" to measure if there is a significant rise in greed in the last 24 months.

Since the financial crisis in 2008, stock markets all over the world knew one direction - up towards new highs. The Dow Jones Industrial, as one example, recorded an astonishing 71 record closes in 2017 – the

most all time for a single calendar year.¹ Other globally recognized indexes like the German DAX, or the English FTSE100 hit record highs during 2017², while the Japanese Nikkei 225 had 16 straight sessions in which the index closed higher, the longest such streak in its history.³ 2017 saw high-risk high-return investments like Bitcoins and other cryptocurrencies soar to mind-boggling market capitalisations, despite governments introducing regulations on cryptocurrencies. How can one explain the increasing willingness to take risks during the latest bull market

we are in? Especially while keeping in mind that the recent bull markets is one of the longest ever experienced, investors still are more than willing to take more risk and invest in stock markets and other volatile assets and ignore more and more the safe havens like governmental issued bonds. Is it solely the result of central banks worldwide keeping the interest rates worldwide on a historically low level? Or does the greedy mind of humans see the success of others in the last couple of years and try to outperform them?

Greed as an emotional state of mind

More than a century passed since the introduction of the "economic man" later often referred to as "Homo economicus", but research on the topic of behavioral finance shows that investing in capital markets isn't always based on rational decisions because of investors' various biases. These biases are broadly discussed in research papers and include, amongst other things, herding, regret or overconfidence.⁴ The commonality between all three biases? Psychological factors like fear or greed.

History has many examples of smart investors, who are cautious when others are greedy and vice versa. “I am greedy when others are fearful”, Warren Buffet said, explaining his strategy of buying undervalued stocks, when everyone else is selling.

Brain scientists go as far as to state, that our brain has not greatly evolved since the last 70,000 years.⁵ Basically, we are looking for things we can use or consume (greed) or we try to prevent bad things happening to us (fear). Both drives are highly motivated by our instinct of self-preservation. If we do not consume, we will die. If bad things happen to us, we might die as well.

Merging neuroscience with pricing, as research found out, consumers will see low prices, daily deals or discounts as incentives to buy. However, once a price is lowered, consumer brains swap the discounted price for the normal price.⁶ What was once considered a bargain is soon considered as normal.

The same is true in the opposite direction. Once investors get accustomed to a share, that has already risen by, say 50%, they assume that it will go up further. Conditions, that are increasingly beneficial to us, are soon considered to be normal. The reason is quite simple: In a world full of difficulties and hardships, mankind could only evolve by always marching forward and climbing the next hill.⁷ Doing so releases endorphins in our brain, our bodily drugs of happiness. Only keeping the status quo, however, does not release any of these. So, things and events that used to be extraordinary in the past are considered to be normal, as long as they evolve as before. Usually, there is a rude awakening, when things return to “real” normal again. A boom period is over, an upturn turns into a downturn, and luck turns into bad luck or stock market head south instead of north.

The ancient Greek used the word “hybris” to explain the special character trait of human nature to overestimate one’s own skill and luck. Hollywood movies on finance like Oliver Stone’s “Wall Street” or Martin Scorsese’s “Wolf of Wall Street” are packed full of investors and salespeople, who – erroneously – think, that good times will go on forever. History has many examples of smart investors, who are cautious when others are greedy and vice versa. “I am greedy when

others are fearful”, Warren Buffet said, explaining his strategy of buying undervalued stocks, when everyone else is selling (Buffet, 2010).⁸ “For me, I have always been driven harder by the negative things in my life versus the positive”, Kyle Bass, founder of Hayman Capital Management, said in an interview with Tony Robbins.⁹ Bass made billions, when he bet on the decline of the US real estate market in the wake of the crisis of 2007/2008. His simple finding was, as in physics, that everything, that goes up, must also go down. However, wishful thinking has it that investors often assume, that things only go up and never down. It was the thinking at the first dot.com bubble in 2000 as well as in the housing bubble before 2007. Looking at the stock markets, we could ask, if we are living in a bubble again.



Analyzing greed as an emotion which affects investors is not only discussed in behavioral finance research papers, but is also measured as an investor sentiment.

Empirical analysis

Analyzing greed as an emotion which affects investors is not only discussed in behavioral finance research papers, but is also measured as an investor sentiment, for example by the well-known “Fear & Greed” index of CNN, which calculates the investor sentiment on the American market. Seven different indicators factor in the calculation of this index, for this article there are three factors, which are particularly suitable to measure the greed of investors. The demand for junk bonds, measured by the spread between investment grade bonds and junk bonds, the market volatility on European stock markets and the stock price strength as number of shares trading at the upper quantile of their respective 52-week high versus those trading at their 52-week low.

The determination of what is deemed as a “safe bond” is harder these days than it has been years ago. Due to many political insecurities in the last year (Catalonia crisis in Spain or North Korea vs. US) or this year (elections in Italy) brought volatile risk premia to governmental bonds like those issued by Spain, South Korea or more recently Italy.

Governmental bonds from Italy – as an example – just managed to yield higher than most of the members of their Domestic Equity Index, meaning investors giving companies like Ferrari a lesser probability to default than their home country.¹⁰ Having a closer look on European junk bonds, there are signs of greediness and twisted interpretation of risks as well by investors. The yield of the Intercontinental Exchange (ICE) Bank of America Merrill Lynch’s euro high-yield index recorded a record low at the end of 2017 with just over two percent, dropping over four percent in a span of just over a year and a half and only coming back slightly to just over three percent by mid of June 2018.¹¹

The volatility as measured by the VSTOXX Index shows that the volatility is on historically low levels in the last couple of years. To put the relative low figures in perspective, the VSTOXX marked a record low with 11.05 at the end of 2017 compared to

an average of about 24.5 since 1999.¹² One possible explanation for the low volatility in the last couple of years is the high levels the EURO STOXX 50 was investors positioned themselves accordingly, and did not get unreasonably greedy by trying to invest further in the EURO STOXX 50. However, the validity of volatility indexes and therefore their use as a “Fear-Index” has been broadly discussed in the beginning of 2018. With a potential manipulation of the VIX, the American equivalent of the VSTOXX, critical voices were suspicious of the hike in volatility at the beginning of 2018 in the VSTOXX, those critics were quickly appeased due to the fact, that the two “Fear-Indexes” would be calculated differently.

The last parameter discussed to assess the greediness of investors is the stocks trading at their upper or lower 52-week range. As indicated by Figure 1, basically all noteworthy European indexes are



The volatility as measured by the VSTOXX Index shows that the volatility is on historically low levels in the last couple of years.

trading close to their respective 52-week high. The 52-week highs of the DAX30 and FTSE100 represent all-time highs for respective index. Keeping political tensions in mind which occurred during the last year (Catalonia Crisis, Trump vs. Kim Jong-un) and more recently the looming trade war including the US putting punitive tariffs on European goods like steel and aluminum, and especially for Germany, more important impending potential tariffs on European cars, cannot prevent the European stockmarkets to trade at a high level. However, stock markets in Italy and Spain, where political news are still a major topic trade consequently further away from their 52-week high than the other major European stock markets.

To further analyse whether investors in Europe got greedier in recent years, the European Exchange-Traded Fund (ETF) market will be examined. European domiciled ETFs have almost trebled their assets under management in the last five years; assets under management in Europe nearly trebled from 283 billion euros by the end of 2013 to over 670 billion euros the end of 2017.¹⁴

Figure 1. European Stock indexes trading near their respective 52-week high¹³

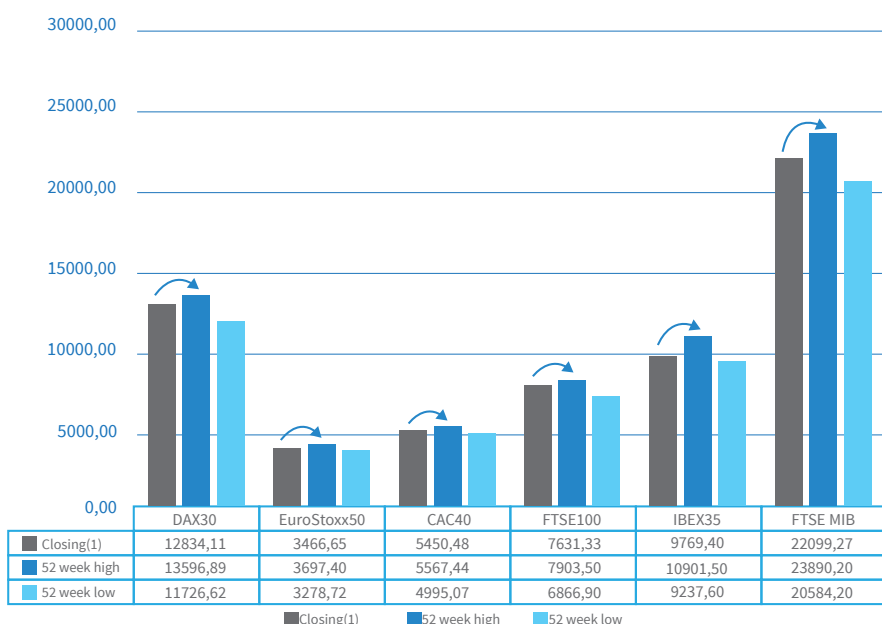
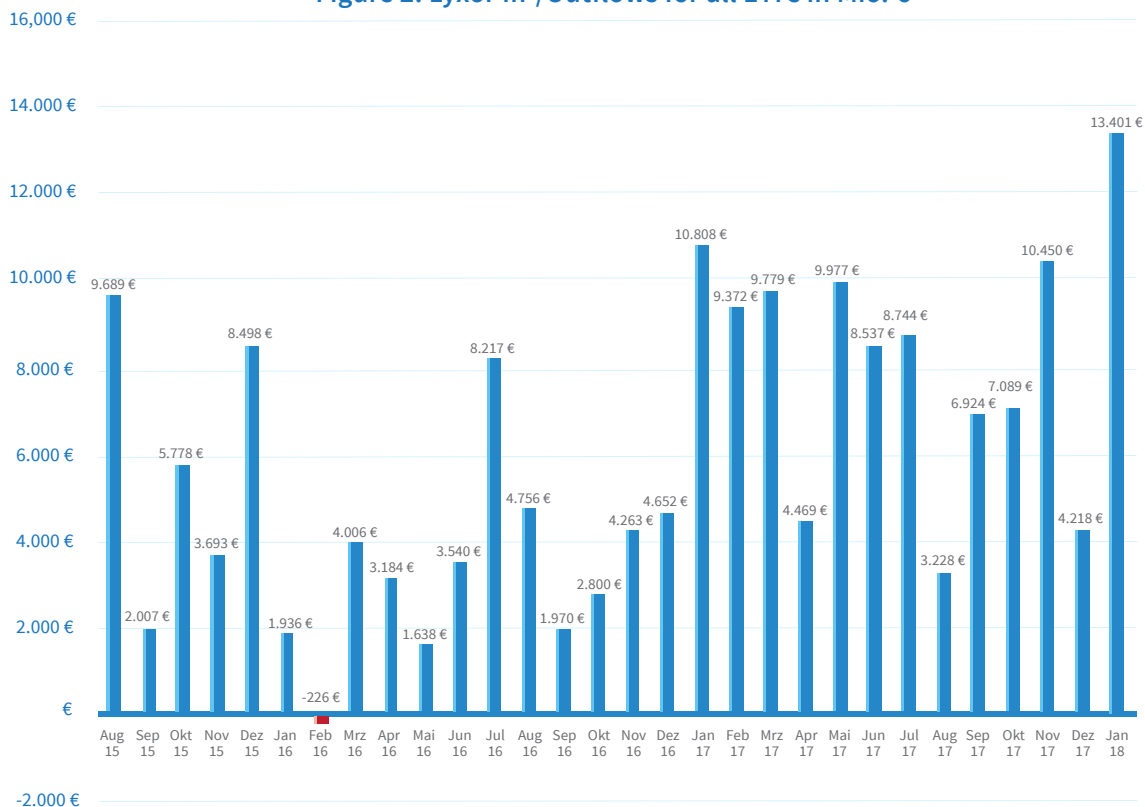


Figure 2. Lyxor In-/Outflows for all ETFs in Mio. €¹⁶

In addition to the overall assets under management trebling, the question now has to be in which assets did investors allocate their money. As a benchmark for the European market, the monthly surveys from one of the leading European ETF providers in Lyxor have been analysed. During the period from August 2015 until January 2018, 29 out of 30 monthly net inflows for all provided ETFs by Lyxor have been positive.¹⁵

Having a closer look on 2017, investors especially allocated their resources in risky assets with inflows (in descending order from their total inflows) in European stocks, US stocks, corporate bonds, emerging markets stocks, emerging market bonds, Asia equity, US-Treasuries and high-yield bonds. The only asset class with outflows for the whole year of 2017 were European governmental bonds. Even US-Treasuries that (usually) carry a higher interest rate than their European equivalents (but presenting a risk for European investors due to the Dollar exposure) weren't in high demand for those investing in Lyxor ETFs.¹⁷ To conclude, how can those numbers be transferred to the determination of greed by investors?

Conclusion

It isn't easy to determine real greed, as there could be tactical or strategic reasons behind the allocation of funds by investors. However, there are reasons suggesting greed from investors nowadays, as stated in the beginning alternative investments like bitcoins grew faster and faster solely based on speculation or – as showed with investments in Lyxor ETFs – the steady growth of total funds being invested in risky assets to seize every last opportunity of the current bull market.

Biases introduced in the beginning can be observed in those types of investment. Cryptocurrencies are a prime example for herding, as more and more people saw the success of others investing in them plus the news flow getting bigger and bigger, people invested making an emotional decision instead of a rational one. Herding and group think are also driven by the brains "greed center", driven by our drive for self-preservation. "There could be food", the brain thinks, "everyone else is getting. If I do not follow the herd, I will get nothing."



IT ISN'T EASY TO DETERMINE REAL GREED, AS THERE COULD BE TACTICAL OR STRATEGICAL REASONS BEHIND THE ALLOCATION OF FUNDS BY INVESTORS.

For investors favoring the regular financial markets, another bias could be seen. Traits of overconfidence, because of successful years in the past, could be one possible explanation for investors still being in “risk-on” mode. That includes the trust that on one side central banks keeping their interest rates on low levels or very slowly raising them, which helps the stock markets and on the other side a stable global economy preventing a high default rate of the – for now – favored junk bonds, high-yield bonds and corporate bonds. In this case, not only low interest rates care for high net present values of future cash flows, and thus high stock valuation, but the central banks, especially the European Central Bank (ECB), act as a “buyer of last resort”, keeping interest rates low and doing, as Mario Draghi said “whatever it takes” not only to save the euro, but also to prevent turning investors greed into fear too soon.

What should be monitored in weeks and months to come are rises in the volatility index (especially based on political topics) as first indicators of fear by investors or sudden spikes in short-position holdings by investors. However, in the end, the laws of physics and gravity will prevail, as Kyle Bass said: “Everything that moves up needs to move down as well.” 📉



Veit Etzold is professor of marketing strategy, sales and storytelling in the Department of Small and Medium Enterprises at Aalen University in Baden Württemberg, Germany and is a consultant and lecturer on corporate storytelling. He is one of Europe’s foremost speakers on strategy and storytelling and the author of several best-selling thriller novels. His clients include global corporations, mid-sized companies, consultancies, start-ups and private equity and venture capital firms. He has worked in media and banking, as a consultant at the Boston Consulting Group (BCG) and as program director at ESMT (European School of Management and

Technology). Veit Etzold holds a Ph.D in Media Science and an MBA from IESE Business School. You can contact him on veit.etzold@hs-aalen.de



Pascal Staiger is a graduate of Aalen University where he completed his Bachelor’s degree in International Business with Finance and Accounting as his Major. During his time at Aalen University Pascal gained practical experience in both fields by completing internships in a small-sized company based in London (Accounting) and during an internship for one of Germany’s leading institutional Asset Managers completing projects related to option strategies and pension portfolios. Currently employed as an Intern at Daimler AG, he will start his MSc in Finance at Trinity College Dublin this autumn. You can contact him on Pascal.Staiger@web.de

References

1. Nasdaq.com (2017), Dow Secures Historic 71st Record Close, <https://www.nasdaq.com/article/dow-secures-historic-71st-record-close-cm898075>
2. See Figure 1
3. Ming, Chaeng (2017), All good things come to an end: Japan's benchmark just finished its longest ever win streak, <https://www.cnbc.com/2017/10/25/japan-stocks-nikkei-225-win-streak.html>
4. Lo, Andrew/Repin, Dmitry/Steenbarger, Brett (2005), Fear and Greed in Financial Markets. A Clinical Study of Day-Traders, Cambridge, MA
5. Häusel, Hans-Georg (2008), Neuromarketing. Erkenntnisse der Hirnforschung für Markenführung, Werbung und Verkauf, Freiburg
6. Kennedy, Dan/Marrs, Jason (2011), No B.S. Price Strategy. The Ultimate No Holds Barred Kick Butt Take No Prisoner Guide to Profits, Power, and Prosperity, Irvine
7. Roth, Gerhard (2005), Das Gehirn und seine Wirklichkeit. Kognitive Neurobiologie und ihre philosophischen Konsequenzen, Frankfurt am Main
8. Schroeder, Alice (2009), The snowball. Warren Buffett and the business of life, Updated and condensed ed., New York, NY
9. Robbins, Anthony (2014), Money. Master the game ; 7 simple steps to financial freedom, New York, NY
10. Pal, Alasdair/Ramnarayan, Abhinav (2018), Ferrari and Ray-Ban deemed a safer bet than Italian government bonds, <https://www.reuters.com/article/us-italy-markets-corporates/ferrari-and-ray-ban-deemed-a-safer-bet-than-italian-government-bonds-idUSKCN11W2G8>
11. Federal Reserve Bank of St. Louis (2018), ICE BofAML Euro High Yield Index Effective Yield, <https://fred.stlouisfed.org/series/BAMLHE00EHYIEY>
12. Eurex Group (2017), Low-Volatility 2017 Marks High Demand for VSTOXX, <http://www.eurexgroup.com/group-en/newsroom/vstox-lookout/VSTOXX-low-volatility-2017/3260868>
13. Yahoo Finance (2018), <https://de.finance.yahoo.com/quote/%5EGDAXI?p=%5EGDAXI>, <https://de.finance.yahoo.com/quote/%5ESTOXX50E?p=%5ESTOXX50E>, <https://finance.yahoo.com/quote/%5Efchi/>, <https://finance.yahoo.com/quote/ftsemib.mi?ltr=1>, <https://finance.yahoo.com/quote/%5EFTSE/>
14. Masarwah, Ali (2018), ETF-Branche in Europa erreicht 2017 neue Rekordhöhen, <http://www.morningstar.de/de/news/164300/etf-branche-in-europa-erreicht-2017-neue-rekordhoehen.aspx>
15. See Figure 2
16. Data from monthly reports of Lyxor from July 2016, March 2017 and January 2018 from <https://www.lyxoretf.de/de/instit/market-insights/etf-trends>
17. Monthly reports between January 2017 to January 2018 from <https://www.lyxoretf.de/de/instit/market-insights/etf-trends>

Herding and group think are also driven by the brains **“greed center”**, driven by our drive for self-preservation. **“There could be food”**, the brain thinks, **“everyone else is getting. If I do not follow the herd, I will get nothing.”**