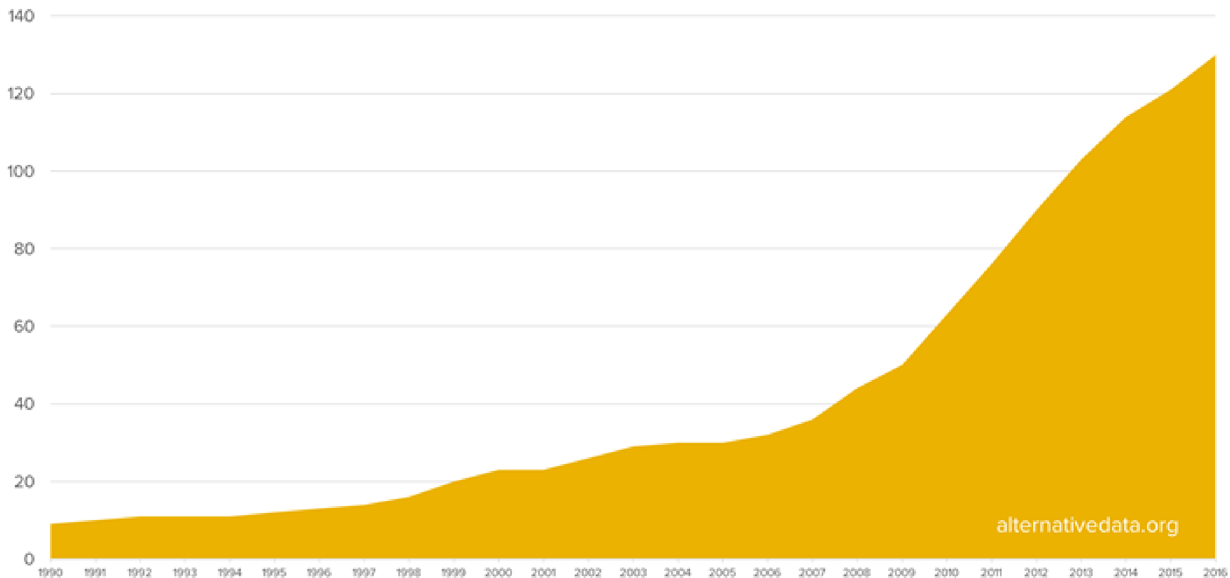
Ayaltis INSIGHT – April 2018

Topic of the Month: Alternative Data

Recent past has seen the rapid increase of technology, from hardware to software applications allowing to gather information. The amount of data available is humongous. There is no surprise that social media companies are ready to invest large amounts of money to connect the whole world. Gathering information about people's habits, interests and friends represents a treasure for any marketing company. Now the technology also has a reverse aspect that is gathering interest: not only would it be possible to scrutinize information about people's habits, it is possible to use technology to influence their choices. The recent concerns about the use of personal data to analyse and to influence voters during the latest presidential election is probably just the tip of the iceberg. The illusion of having access to unbiased information through internet gives user confidence about the neutrality of the news they read; in fact, those specific news are targeted to that specific user according to his interest, his personality, his profile… they are anything but unbiased.

Chart 1: Number of Alternative Data Providers



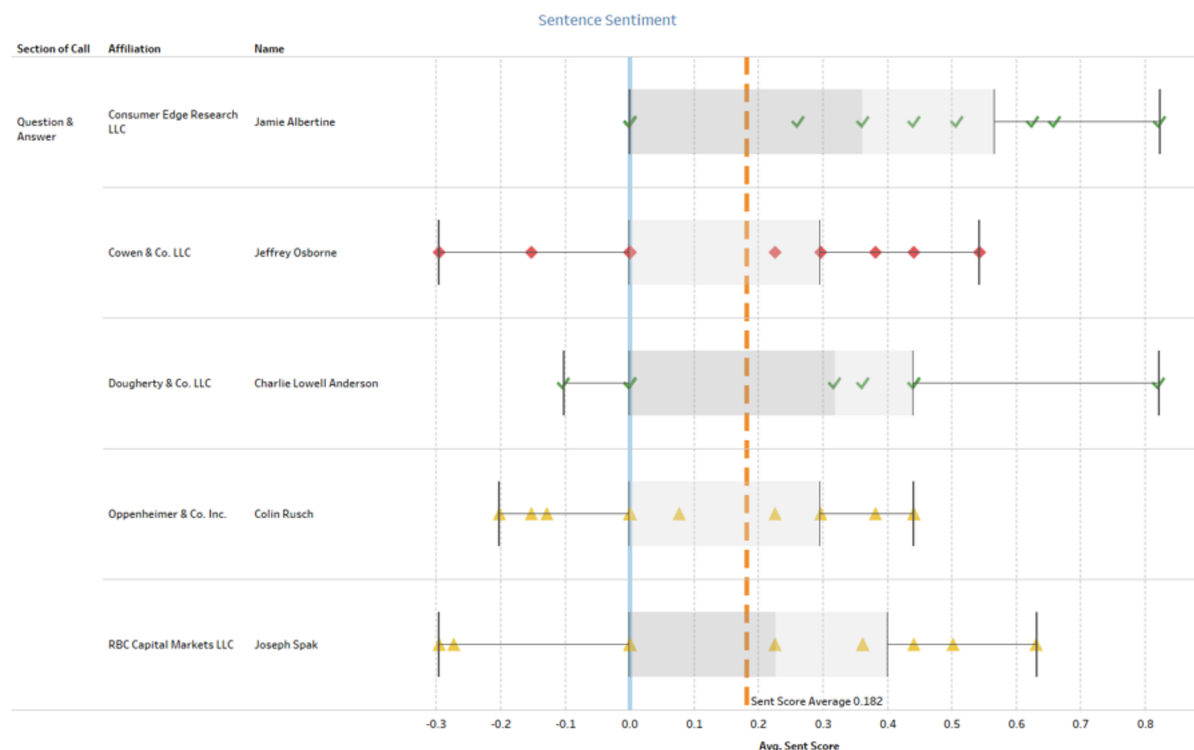
Source: AlternativeData.org

The hedge funds industry is also engaged in that race to exploit those data sets to generate new sources of returns. They are called "Alternative Data", in opposition to data that hedge funds have historically been using for their investment decisions. In the case of equities, those traditional data are market data such as price, volume, order book, dividends, related securities from the company's capital structure, and fundamentals such as earnings, EBITDA, capex. This has historically allowed hedge funds to develop strategies to trade equities on a technical basis, for

example comparing the specific security to its peers, or on some patterns that develop over a few days (short-term auto-correlation) or a few weeks (institutional investors building large positions). Fundamental data relate to the most traditional way of trading stocks, through finding the companies that are undervalued according to the hedge funds' proprietary valuation models.

Alternative data now refer to any other data that are not available from the market exchanges, the regulators or from the companies themselves. Alternative data have no specific source and no specific format. For example, credit card companies have the daily spending of hundreds of millions of consumers. The data is gathered by the credit card companies through their own technology systems. By exploiting such data in almost real time, financial analysts would be able to assess with high precision which company is behind or ahead its sales forecasts. Another example is with social networks: analysing in real time which products are being liked on Facebook or on Twitter, gives a strong indication on whether consumers favour a specific product or not. The use of geo-location, i.e. gathering information about the location of any given individual through phone signals, can indicate in almost real-time how many people are for instance attending a theme park. So, anyone could possibly estimate with high accuracy if the company running those theme parks is profitable or not.

Chart 2: Natural Language Processing - Example Tesla Quarterly Call



Source: FactSet

Natural language processing is another tool that certain hedge funds are exploiting. Media transcripts, social media messages and traditional headlines and articles offer a vast ocean of information that human beings will never be able to digest in a reasonable amount of time.

Intelligent analysis of written language involves the use of machine learning techniques together with a linguistic process of separating the usual noise of our human interactions from the actual information included in the dataset. One of the numerous implementations is the identification of the average sentiment of a Q&A-call between management of the company and financial analysts (see above chart), to determine their position (bullish, bearish or neutral) and their ratings (buy, sell, hold) before they even write their reports. More generally, the large quantity of data and the extreme complexity of natural language analysis create a promising field of study and potentially a new way of trading.

One can easily see the advantage of using alternative data. While a traditional analyst has to wait for the company's announcements on the quarterly sales, the alternative data user can already have a strong estimate on how much sales that company has done, by exploiting credit card figures, online sale numbers, interests in social media, number of people who visited the shop, and multiple other data sets, in almost real-time. However, making efficient use of alternative data is often costly both financially and in terms of time because cleaning and analysing big data sets requires strong technology set-ups and manpower. For example, anyone trying to use geo-location to assess the attendance in a restaurant would have to differentiate between employees and customers, by running algorithms to detect if a person is walking in that restaurant way prior to lunch hours and leaving much later, in the case of an employee. Having to analyse thousands of restaurants across a whole country requires to analyse terabytes of data and can only be done through powerful technology.

Looking at the hedge fund universe, alternative data is mostly used by quantitative hedge funds. However, there are discretionary hedge funds which are also actively using these new sources of data. Furthermore, this new trend is primarily reflected in equities trading. Commodities trading as well has started to explore this space.

From our point of view, anyone who can successfully exploit alternative data will have a competitive advantage. However, the complexity associated with exploiting unclean large data sets makes it a slow race. But the race is on … and no-one wants to be left on the side.

Thoughts and News

Hedge Funds Performance in Q1 2018

Hedge funds started off 2018 on the right foot: in January, all strategies posted a positive performance, each of them gaining more than 1%, with Macro strategies leading the pack, surging a whopping 3.8%. February marked a reversal, with all strategies but Relative Value deeply negative: Macro hedge funds gave back all of their January gains, plummeting almost 5%. The negative spiral continued into March: no strategy experienced a positive month. Event Driven strategies had a particularly negative month, down 2.16%, due to the erratic economic policies of the White House. After Q1 2018, the average HF is down -0.98% year-to-date, while the S&P is down -1.22% for the same period (as of March 31, 2018).

Chart 3: HFRX Indices Overview Q1 2018

Jan-18	HFRX Relative Value 1.09%	HFRX Emerging Markets 1.43%	HFRX Event-Driven 1.76%	HFRX Global 2.45%	HFRX Equity Hedge 3.41%	HFRX Macro 3.80%
Feb-18	HFRX Macro -4.86%	HFRX Event-Driven -4.38%	HFRX Global -2.42%	HFRX Equity Hedge -1.49%	HFRX Emerging Markets -0.90%	HFRX Relative Value 0.23%
Mar-18	HFRX Event-Driven -2.16%	HFRX Global -0.98%	HFRX Emerging Markets -0.88%	HFRX Macro -0.79%	HFRX Equity Hedge -0.69%	HFRX Relative Value -0.33%

Source: HFR, Ayaltis Proprietary Database

Paul Tudor Jones Sees Inflation on the Rise and Recommends Commodities and "Hard Assets"

Market wizards and hedge fund icons recently agreed that we entered into a bond bear market: Ray Dalio made his point already in late January, prior to the February market volatility. He expects the Fed to move faster in raising rates than what is expected.

Paul Tudor Jones is not often speaking to press. It was rare occasion to hear his views on markets when he talked to Goldman Sachs clients. He shared the opinion of Ray Dalio that bonds are overpriced. In his view inflation is moving at an accelerating pace and we are in a scenario similar to the late 1960s, where low rates and fiscal stimulus were used to keep the economy at full swing. His investment recommendation is towards commodities and hard assets.

Read on at

https://www.cnbc.com/2018/03/01/here-are-highlights-from-paul-tudor-jones-interview-with-goldman-sachs.html

https://www.bloomberg.com/news/articles/2018-03-01/tudor-jones-stands-with-dalio-gross-in-calling-bond-bear-market

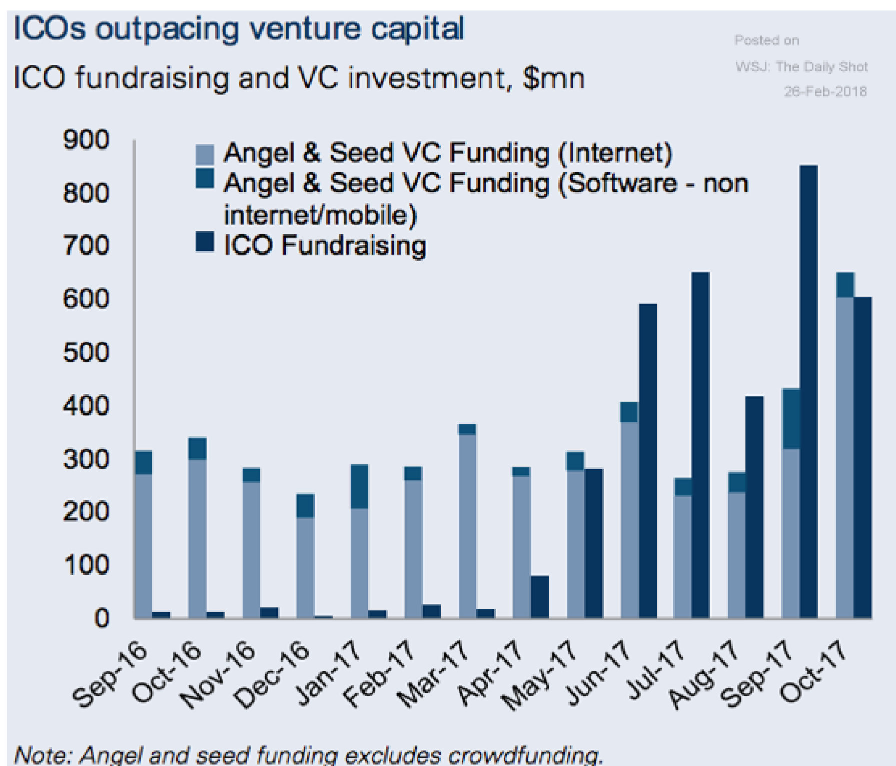
https://www.bloomberg.com/news/videos/2018-01-25/bridgewater-s-ray-dalio-says-bonds-are-in-a-bear-market-video

ICOs and Venture Capital

Would you have known what ICO stands for a year ago? No need to be ashamed if you would not, yet have this abbreviation on your radar. Encyclopaedia Britannica also only officially added the words “cryptocurrency”, “ICO” and “blockchain” this March. Initial coin offerings started their sharp rise about a year ago and 2017 counted 210 ICOs accounting in total to USD 3.8 billion (Source: coinschedule.com) with most of them in December 2017. This year, the number of ICOs has climbed to 17 so far, but those already amount to a volume of USD 2.86 billion.

An important detail to keep in mind is that not all ICOs aim to launch and succeed as the next big cryptocurrency. Tokens generated through ICOs may have different purposes: next to the so called “altcoins”, who want to be the next big Bitcoin, there are so called equity tokens and utility tokens. Equity tokens represent ownership in an asset and therefore a venture capital funding (crowd-sale). Instead of going through an IPO, a company can issue shares and voting rights via blockchain technology as a “coin” (equity token). In contrast, utility tokens are also called app coins or user tokens. They intend to provide access to a future service or product. These tokens are not considered an investment. It is more like a coupon as it does not represent an ownership right.

Chart 4: A New Way of Funding



Source: CoinSchedule, CB Insights, Goldman Sachs Global Investment Research

Read on at:

http://strategiccoin.com/3-types-ico-tokens/

https://techcrunch.com/2018/03/04/icos-delivered-at-least-3-5x-more-capital-to-blockchain-startups-than-vc-since-2017/

The Impact of US Government on Hedge Fund Trading Around M&A-Events

On 12 March 2018, news emerged that President Donald Trump issued an executive order to block the hostile takeover of Qualcomm Inc. by Broadcom Ltd. Government intervention in US M&A deals, is becoming a not so unique phenomenon and something hedge fund traders in the Event Driven space must carefully take into account. While antitrust merger enforcement has remained similar to the prior Obama administration (yet, Trump only recently appointed a new head of the DOJ Antitrust Division and proposed four nominations to fill FTC Commissioner roles, so the outcome remains to be seen), with the exception of the intervention on the massive AT&T/Time Warner transaction (which was a rarity since it was a vertical merger), there has been a significant increase of the stoppage of deals due to security concerns. In fact, this has been the 10th deal blocked by the CFIUS, the US Committee on Foreign Investments.

Chart 5: List of All Blocked M&A-Deals

Killed or Abandoned Under Trump

Committee on Foreign Investments in the U.S. steps up opposition to takeovers from abroad

Target	Would-be acquirer	Country	When killed	Deal size
Qualcomm	Broadcom	Singapore	Mar 2018	$117 billion
Xcerra	Hubei Xinyan Equity Investment	China	Feb 2018	$580 million
MoneyGram	Ant Financial Services Group	China	Jan 2018	$1.2 billion
Cowen	China Energy Company Limited	China	Nov 2017	$100 million
Aleris	Zhongwang USA	China	Nov 2017	$1.1 billion
HERE	NavInfo	China	Sep 2017	$330 million
Lattice Semiconductor	Canyon Bridge	China	Sep 2017	$1.3 billion
Global Eagle Entertainment	HNA Group	China	Jul 2017	$416 million
Novatel Wireless	T.C.L. Industries	China	Jun 2017	$50 million
Cree	Infineon Technologies	Germany	Feb 2017	$850 million

Source: Bloomberg

Trump has reiterated the importance of national security and the need of growing scrutiny on Chinese investment, especially in the technology sector. Yet, the intervention on the Broadcom/Qualcomm deal marks a new era of government intervention because the acquirer had absolutely no tie to China. In fact, Broadcom has its headquarter located in Singapore, but will redomicile in the US, where it conducts most of its operations.

The motivation behind the CFIUS decision is the fear that Broadcom, a notorious cost-cutter, would hinder Qualcomm's R&D investments, leaving the door open for Huawei, the Chinese technology giant, to become the dominant supplier in the wireless technology business.

It remains to be seen whether this latest deal stoppage intervention will deter companies from investing in M&A activities. In any case, it is for sure that government intervention is a source of market volatility and widening the spreads on the deals. The S&P 500 technology sector dropped more than 1% after the news came out, Qualcomm's shares fell almost 5% while Broadcom gained 3.5%.

Read on at

https://www.bloomberg.com/news/articles/2018-03-12/trump-issues-order-to-block-broadcom-s-takeover-of-qualcomm-jeoszwnt

Refresher: Horizontal vs. Vertical Merger

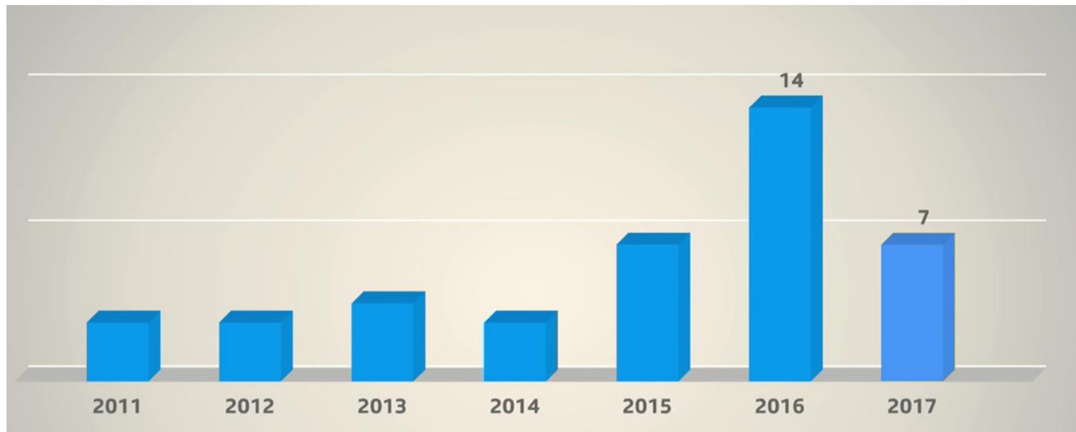
A horizontal merger is a merger between competitors that operate in the same spot of the value chain. They are closely scrutinized by antitrust authorities because they tend to reduce competition, giving the new company a monopolistic position in the industry and the opportunity to raise prices.

Vertical mergers involve companies at different points in the value chain. So far, they have received a lighter treatment, since backward/forward integration of operations can generate synergies, improve efficiency and lead to lower prices. Yet, the recent antitrust approach is starting to consider vertical mergers as problematic, since they could generate conglomerates that could leverage on their power to create "market foreclosures", increasing prices or even denying access to competitors to its product/service.

Will Switzerland Become More Restrictive Towards Foreign Investments?

It seems that also Switzerland is contemplating some restrictions on foreign investments in local firms. Chinese investments are especially in the focus: takeovers of Swiss firms by Chinese organizations have experienced a massive increase in the last years, with the highlight of ChemChina's acquisition of Basel-located agrochemical company Syngenta AG, for reported $44 billion. Moreover, Swiss corporations seems still to be on Chinese companies' shopping lists.

Chart 6: Chinese Acquisitions of Swiss Firms



Source: EY

Two interpellations have been submitted to the Federal Council, requesting information on how foreign investments in Swiss firms can be controlled. Furthermore, they aim to define which industry sectors are of strategic importance to Switzerland, where foreign acquisitions of Swiss companies would have to undergo government approval. In Germany such laws already exist: investments resulting in a foreign institution holding more than 25% of the shares of a local company must undergo government scrutiny: German authorities have to evaluate if the foreign acquisition harm state interests.

In any case, the Federal Council reiterated in August 2017 to be attentive to the development of the Chinese shopping spree, but claimed it was in the state's best interests to keep an open politics towards foreign investments: restrictions on acquisitions would have a negative effect on the Swiss economy, considering as well possible repercussions against Swiss companies' own foreign investments, which are vital to their success (the investments of Swiss corporations in China have grown fivefold in the last 10 years).

Watch the video (in German)

https://www.srf.ch/sendungen/tagesschau/einmarsch-in-afrin-wahlen-in-russland-forschungsreise (from 9'38'')

Read on at (in German)

https://www.parlament.ch/de/ratsbetrieb/suche-curia-vista/geschaeft?AffairId=20173387

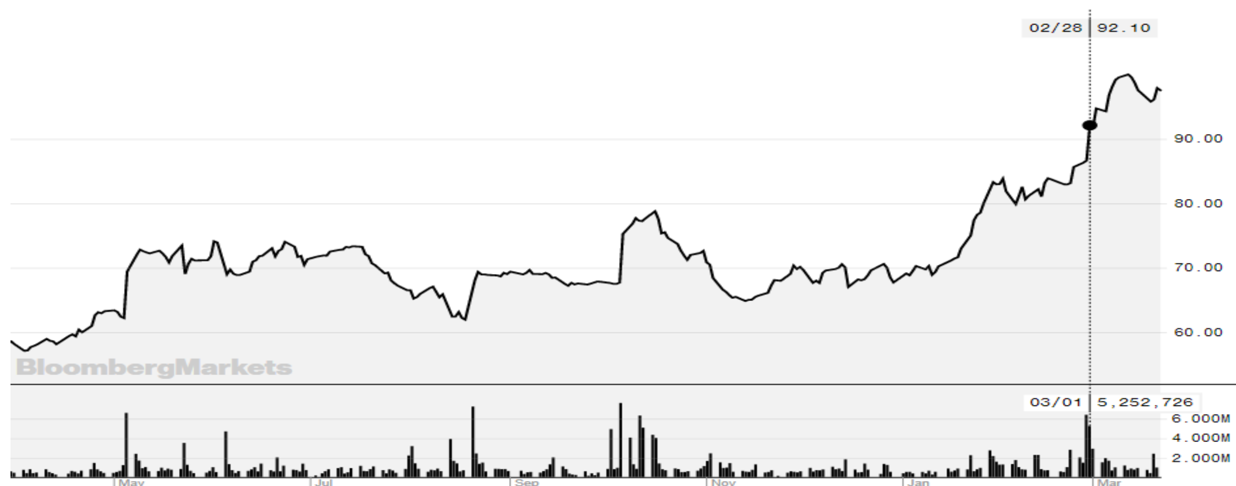
Ackman Closes His Short Position on Herbalife

Is this the end of the Herbalife saga? More than five years after shorting the company for a notional of $1 billion, activist investor Bill Ackman exited his bet. The Herbalife saga raised into the spotlight due to an epic interview on CNBC starring the two hedge fund titans involved: Pershing Square Capital Management's Bill Ackman and Icahn Enterprises' Carl Icahn, and also by the recent Netflix documentary "Betting on zero".

Ackman claimed Herbalife to be a pyramid scheme, that would implode in a few years. The company shares were trading in a price range between $40 and $50. Ackman had forecasted that the firm would collapse under regulatory scrutiny and had predicted a share price of zero. In December 2012, after explaining with a 334-slide long presentation why Herbalife was a fraud, the stock price plummeted to $27. A few weeks later, Icahn entered the trade taking the opposite position: he bought 13% of Herbalife's shares, later increased to 23%. It was not a decision built on fundamentals, Icahn defined it as the "mother of all short-squeezes".

Herbalife was investigated by the U.S. Federal Trade Commission (FTC), but it was only condemned to pay a $200 million fine. Due to the pyramid scheme accusation being rejected, the mild sentence received and the company aggressively repurchasing shares, Herbalife's share price skyrocketed. On 28 February 2018, Ackman announced he fully exited his position, causing a share jump of almost 10%. Herbalife saw its shares reach an all-time high at $99.9 on 12 March 2018, with the stock soaring around 100% since Ackman's investment.

Chart 6: Herbalife Share Price



Source: Bloomberg

Only time will tell if Ackman was right in the first place. One of his greatest trades took more than 6 years to materialize, when in 2002 he was one of the first investors to bet against CDS and CDO insurer Municipal Bond Insurance Association (MBIA). After receiving accusations of market manipulation and initial losses due to the seemingly endless mortgage bull market, the bet eventually paid off in the mortgage crisis in 2008.

Read on and relive the epic CNBC interview at

https://www.cnbc.com/2018/02/28/ackman-exits-bet-against-herbalife.html

Download Ackman's 334-page presentation at

https://www.mlmwatch.org/04C/Herbalife/ackman.pdf

Refresher: Definition of Short Squeeze

A short squeeze is a situation in which a heavily shorted stock moves sharply higher, forcing more short sellers to close out their short positions to cut losses and adding to the upward pressure on the stock. Traders often look at SIR (Short Interest Ratio), which calculates in how many days all short position on a specific stock can be covered (shorted stocks divided by daily trading volume of the share). The higher the SIR, the more powerful the effect of the short-squeeze could be. Therefore, contrarian traders aim at stocks with high short interest and SIR to mostly beneficiate from the eventual short-squeeze.

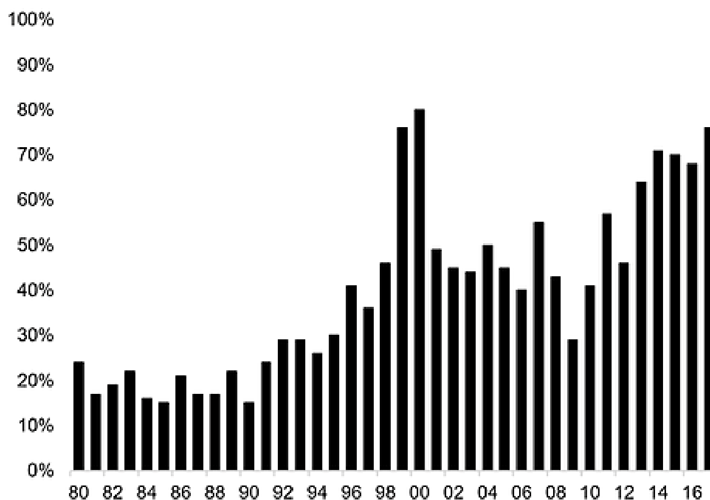
Read on at: https://www.investopedia.com/terms/s/shortsqueeze.asp

IPOs – New Paths and Old Memories

The IPO market has certainly picked up in the past months. While Aramco, the Saudi Arabian oil company, has taken a step back and reviewed its plans, the tech companies kept their promise: Dropbox was listed on March 23 and Spotify is in the pipeline for April. Spotify, the world's leading music streaming service, is a European company, which chose the US market for its listing. This is not so unusual, but another fact about the Spotify IPOs is quite unconventional: the company chose the route of a direct listing and will therefore not sell new shares to raise money, but just list its current shares. Moreover, Spotify chose not to go through a roadshow and chose Citadel as a market maker to assess investor's appetite at the day of launch.

Taking a step back and looking at the types of IPOs, it becomes apparent that IPOs of companies with negative earnings are on the rise. A trend last spotted just before the dot.com collapse. Biotech companies account for the biggest share followed by tech companies (including Spotify).

Chart 7: IPOs with Negative Earnings



Source: Topdown Charts

Read on at

https://www.topdowncharts.com/single-post/2018/03/14/A-Familiar-if-Ominous-Sign-in-the-US-IPO-Market

https://venturebeat.com/2018/03/15/spotify-shares-5-reasons-its-skipping-a-traditional-ipo/

Digging Deeper: Interest Rate Sensitivity

Duration is the key figure to keep in mind when talking about moves in interest rates. Duration measures the sensitivity of a fixed income investment to interest rate movements. The calculation takes into account the years to maturity as well as the yield at the starting point. Bonds with longer maturity face higher duration. Duration is the key metrics to assess a bond's interest rate sensitivity: investments with higher duration are likely to fall more in value when interest rates rise. Different types of calculation prevail: (1) Macaulay duration considers the weighted average cash flow of maturities and is used mostly for immunization strategies, where a portfolio of bond matches a set of liabilities. The result is the duration in years. (2) Modified duration is an adjusted version of Macaulay duration and accounts for changing yields to maturity. Modified duration is more useful in calculating a bond sensitivity to interest rates and accounts well for rather small changes of the yield curve. The result of the Modified duration is a number, which expresses the magnitude of the change of the bond price for every 1% movement in interest rates. One thing to bear in mind is that duration assumes a linear relationship between bond prices and changes in interest rates. Reality looks different: the relationship exhibits a sloped or “convex” shape. Positive bond convexity is a valuable attribute for the investor: bond prices rise more as interest rates fall than they fall when interest rates rise. Therefore, for yield curve changes of bigger magnitude, the convexity effect has to be taken into account. Most bonds exhibit positive convexity: this is especially the case for non-callable bonds (whereas callable bonds have a negative convexity, but they are more cheaply priced to compensate the investor for the lack of this valuable feature).

Bonds related to sovereign institutions are directly linked to interest rate moves. Corporate bonds, of course, are affected as well but to a different degree: investment grade bonds are more exposed to rising rates than high yield bonds. The latter are much more linked to credit quality than to interest rates. Moreover, investors in high yield bonds usually focus more on the coupon component and are generally more familiar with changes in bond prices. High yield bonds exhibit a higher degree of price fluctuations. While bond prices fall, when interest rates rise, the coupon remains unaffected. So, considering the overall price effect on high yield bond, gradual interest rises are a rather small component. Linking this back to the duration concept, high yield bonds display a lower duration: therefore, a bond with a higher coupon, other things being equal, will be less sensitive to a change of interest rates than the same bond with a lower coupon.

It isn't just bonds, which feel the change in rates. Stock markets, too, perceive the alterations of the fixed income space. In general, stock markets are not too excited about tougher financing

conditions. Classical macroeconomics theory makes the argument of the increasing opportunity cost of spending (and bigger incentives to save) in a rising interest rate environment, leading to a reduced growth in consumer spending; yet as of now it seems to be a neglectable effect given the relative small increase of the federal fund rate so far (now at 1.50-1.75%). However, there are some exceptions: the most well-known are of course financial stocks. Higher rates are regarded as positive for this segment as they translate into higher margins for financial institutions. In contrast, rising interest rates are viewed as negative for the utility sector and the real estate sector: both rely on being able to fund further debt for their ventures and the lower the future debt burden, the better.

Chart 6: Sector Performance S&P 500 as of February 2018

Source: CNN Markets

So much to theory, which does not account for currently prevailing circumstances such as the withdrawal from quantitative easing as well as US tax reform. However, looking at the chart shown above, which focuses on sector performance of the last 12 months, the analysis seems to work, despite other factors influencing returns (among others reliance on exports and weak dollar). The best performing sectors are the financial sector and the industries less depending on debt (such as Information Technology). Sectors with highly leveraged companies having significant floating-rate debt and /or significant short-term debt outstanding, which will need to be re-financed, have suffered the most in the last year.

We are looking forward to your feedback. Please feel free to share your ideas with us and continue the dialogue.

Your Ayaltis Investor Relations Team

Email: ir@ayaltis.com
Phone: +41 43 502 37 60

The information provided in this document shall not constitute or be construed as an offer to sell or as a solicitation of an offer to acquire securities or other instruments in any jurisdiction where such offer or solicitation is prohibited by law or in which the person making an offer or solicitation is not licensed or registered to do so or to any person to whom such offer or solicitation is contradictory to local law or regulation. The information is directed to qualified investors only. The state of the origin of the Fund is Luxembourg. This document may only be distributed in or from Switzerland to qualified investors within the meaning of Art. 10 Para. 3, 3bis and 3ter CISA. The Representative in Switzerland is ACOLIN Fund Services AG, Affolternstrasse 56, CH-8050 Zurich, whilst the Paying Agent is Aquila & Co. AG, Bahnhofstrasse 28a, 8001 Zurich. The basic documents of the fund as well as the annual report may be obtained free of charge at the registered office of the Swiss Representative.