

*Historic volatility is an integral part of this analysis because as we know from option pricing theory, the higher the volatility, the greater the probability that the market will reach a.*

As I wrote in my post on science , science is the action of the people engaged in our democratic work toward our individual and community health and prosperity. The most important science was preceded by the empirical work of the active labor field, usually by regular people without any formal, specifically scientific training. Science has built upon this foundation. Therefore true science, practical science, starts with experimentation which leads to empirical success. Meta-knowledge of empirically established truth can then follow. For science the preliminary induction leads the way, with science as the theory induced and the patterns of deduction then building upon that. All this must be in the service of the people. Even if one disputes the moral character of science, one cannot dispute its need to possess a truth value, and the impossibility of its doing so the moment it diverges from the public good and becomes the tool of capitalism or of any other tyrannical hierarchy. Whether one sees science this way or in the more minimal sense of the scientific method, either way establishment science has abdicated. This is because it has fully embraced an ideology and framework which are antithetical to all human values, all truth values, all objectivity, all integrity. What is this paradigm? Through lobbying for corporate welfare in the form of pro-corporate government funding and strategic deployment of their own money , the corporations have gained control of academic science programs. Their control of agricultural education is especially complete. Career paths all point to the corporate track. Government service is consciously seen as corporate service. The regulator sees himself as a corporate agent. Regulatory agencies and corporations increasingly engage in de jure collaborative projects. Where necessary legislation further encourages or mandates the pro-corporate ideology of the regulator. The executive branch always provides very aggressive pro-corporate impetus. Classical bribery is still rampant in the form of no-show jobs and speaking junkets for suspiciously high emoluments. All this leaves very little room for doubt or even for conceiving an alternative. The vast majority of STEM types never question corporate domination for a moment. Once you completely assimilate the profit motive and its accessories such as patents, and once you see the corporate executives who run this system as embodiments of the Fuhrerprinzip Leadership Principle , it follows automatically that whatever kind of scientific framework and result these Leaders want is Science as such. What follows is that almost all working scientists, and certainly all who aspire to high positions in the hierarchy, envision their entire endeavor in terms of producing the results the corporation wants. They choose their projects and methodologies for these projects accordingly. They interpret their data accordingly. Where they generate unwelcome data they directly censor and suppress it, tendentiously rule it out as irrelevant, or fraudulently claim it really supports their thesis. From another direction, that of the technician rank and file, we have their historically characteristic mercenary mentality which is always ready to serve existing power. Same for their inherently elitist, misanthropic, anti-democratic bent, including their fierce hatred for any kind of democratic oversight. This contrasts completely with their meek submission to regimented control where this comes from an authoritarian bureaucracy. Thus we see the contradiction between STEM disdain for non-credentialed citizens who comment on matters related or allegedly related to science, vs. It boils down to a mindset which is, prior to all content, authoritarian and anti-democratic. From there the ideology seamlessly ramifies itself as the religion of scientism and the political ideology of technocracy. Technocracy is really just a front for direct corporate dictatorship. When I call scientism a religion this is not a metaphor or rhetoric. Historically, scientism and technophilia are rooted in Christian extremism , and often remained overtly so through much of the twentieth century. Indeed, the STEM fraternity displays all the classic traits of religious fundamentalism. Where it comes to STEM types this psychological and ideological way of being is often called instrumental reason. This term sums it up well: But where life actually happens, in deciding what is to be done in the first place, reason, truth, evidence, let alone any human value, mean nothing at all. All morality is referred to the divine beyond. And so as if crushed in a vise, institutionalized science and professionalism in general have

surrendered completely. We can briefly survey a few examples of how the corporate science paradigm manifests. In this way corporate science reproduces and reinforces itself as more corporate science cadres become the reviewers and can more enforce the corporate line. In this way the rich get richer, metaphorically and literally. In an extremity even a duly peer reviewed study can be scrubbed from the record if subject to enough anti-scientific political pressure. At the same time the practitioners assert protocols for rationalizing corporate secrecy where it comes to adverse data. Those such as corporations and regulators who claim to base policy on secret science are openly proclaiming their contempt for science and truth, and openly broadcasting their character as liars and con men. We the people can reject all they say and assume the worst about what the secret data really indicates. This is a basic part of rational method. This is tantamount to a direct assertion that science is whatever the corporation says it is. But this is fundamentally irrational in principle, since a rational person would never trust a sociopathic corporation to certify the safety of its own profitable actions. The result of such an irrational, idiotic process can never have anything remotely to do with real science, and in fact comprises the radical rejection of all scientific standards. In these ways we can see how radically irrational the corporate science paradigm is in principle. Of course its practice is dictated by its contempt for reason or truth and its total commitment to authoritarian power and greed. In public debate as well, anonymous attacks on independent science are standard, whether these come from industry forums such as AgBioForum or from smears published by regulators. Perhaps this is why they can so easily keep regurgitating direct lies which were disproven many years ago, such as that GMOs reduce pesticide use or yield better than non-GM crops. Real science has already amassed vastly more than enough actual evidence against agricultural poisons to convince any rational person. In truth, real science recognizes only one kind of evidence and judges it according to the methods by which it was gathered, in the same way that real justice would impartially assess the testimony of a homeless person and a billionaire who are in dispute. Here, as with credentialism, I propose we hold the pro-GMO activists to their own proclaimed standard. From the beginning of the genetic engineering era the corporations have allowed access to research material only to those researchers who are willing to accept corporate control over their work. This is one of the main purposes of enclosing the materials by patents. According to traditional norms of science, such enclosure and prior restraint would have been considered outrageous and automatically non-scientific and anti-scientific. In science, this is typical of how rank and file practitioners and propagandists work under the dominant paradigm. Again we see how, for those within the framework, the truth or falsity of anything is irrelevant, only how faithfully it reinforces the corporate party line and assists the corporate prerogative on its way. No government or corporation has ever performed a legitimate, full-length toxicity or cancer study, or an epidemiological study in spite of requirements in Europe and elsewhere to do so, upon any GMO. The researchers regularly engage in such fraudulent procedures as replacing animal subjects mid-study or obtaining leftover subject material from unrelated studies and pawing it off as new. So the positive scientific evidence for the safety of GMOs is zero. This is proof that Monsanto and the US government believe the products of genetic engineering are dangerous to health. Obviously the vast human feeding experiment GMOs are now undergoing never obtained consent from the billions of human beings it has turned into guinea pigs. Worse, the experimenters and their supporters in the professional and academic ranks want to withhold all the information they can by opposing real safety testing, suppressing adverse data from the inadequate tests which industry has done, slandering independent science, and opposing labeling. This collapse is simply the process of STEM types completely assimilating the values of their corporate masters. The fact that in place of real science they build such a massive structure of fraud and lies confirms this proof. GMOs and other agricultural poisons are known by the government and corporations to have extremely bad effects on human and animal health, the environment, and on agronomy. The lot of them are nothing more or less than corporate propagandists who through their words and other representations and actions are full participants in corporate crimes against humanity. The corporate prerogative is normative. The corporate project must go forward. Scientific institutions and research must be controlled by the corporations or by corporate-oriented regulators or educational institutions. They must be designed to serve corporate propaganda goals, produce corporate-friendly results, practitioners must be willing to practice their profession under corporate supervision and be subject to corporate censorship. Everyone must

join the mob ranks to condemn bona fide independent science which deviates from the paradigm and produces results which firmly contradict the party line and which, if admitted as the state of science, would harm corporate profits. As much as anyone else the corporate scientists claim that science is objective, rational, fact-based, impartial, and in the service of humanity. This means that science as an established intellectual framework and collective endeavor, as something which is trustworthy, legitimate, and possessing any rational authority, has abdicated. All that is left of science, the true science, are some fugitive, persecuted independent scientists, as well as the vastly greater range of empirical practitioners who increasingly infuse their work with agroecological science, albeit with almost no help, and plenty of hindrance and harm, from establishment sources. And yet in spite of all this the evidence is clear and overwhelming: Across the board, in general and at every point of detail, science affirms and supports agroecology and Food Sovereignty and condemns the failures, poison, and destruction wrought by corporate agriculture. Likely wellsprings of this movement will be ecology, systems analysis, chaos theory and other disciplines at the vanguard of holistic thinking, most of all the thinkers and practitioners of agroecology, all of these infused with the spirit of science. My focus upon corporate agriculture is among other things a case study in this general war of ideas. Science and scholarship have been hijacked by corporate power. The ability of GMOs and pesticides to continue their march to world domination in spite of their complete practical failure and proven health detriments is the most extreme example of this modern evil. If we were to sum it all up in a single epitome, we can call it the final conflict of totalitarian eugenics vs. This is the basic status of the war of ideas and the war of actions. The same goes for corporate agriculture as such, and for corporate rule as such. Since the corporate scientific establishment refuses to police itself, we the people shall have to rescind our confidence in it and our tolerance of it, and we are doing so. We now know this self-policing did not happen, and given the economic authoritarianism of industrialism and its technical knowledge, it was probably impossible. Since we know the technicians cannot be trusted, our only option is to retract our confidence in their whole endeavor. Where it comes to them all we can do is empirically judge prospects and results. If a prospect and result are beneficial we can allow technicians to continue along a path. If prospect looks bad or a result is bad, we must not allow them to continue. Since the establishment has abdicated all responsibility and disavowed even the most basic standards of fidelity to scientific truth and simple human decency, where it comes to such dire threats to human health, we the people shall have to take back science from the hands of those who only abuse and repress it.

## Chapter 2 : Implied volatility - Wikipedia

*Volatility definition, evaporating rapidly; passing off readily in the form of vapor: Acetone is a volatile solvent. See more.*

This means that the price of the security can change dramatically over a short time period in either direction. One measure of the relative volatility of a particular stock to the market is its beta. For example, a stock with a beta value of 1. Conversely, a stock with a beta of. Calculating Volatility Volatility is often calculated using variance and standard deviation. The standard deviation is the square root of the variance. To calculate variance, follow the five steps below. Find the mean of the data set. This is divided by 10, because we have 10 numbers in our data set. Calculate the difference between each data value and the mean. This is often called deviation. Negative numbers are allowed. Since we need each value, these calculation are frequently done in a spreadsheet. This will eliminate negative values. Add the squared deviations together. In our example, this equals This is a measure of risk, and shows how values are spread out around the average price. It gives traders an idea of how far the price may deviate from the average. Therefore, all the values do not fall within three standard deviations. Despite this limitation, standard deviation is still frequently used by traders, as price data sets often contain up and down movements, which resemble more of a random distribution.

## Chapter 3 : Volatility | Definition of Volatility by Merriam-Webster

*volatility makes it significantly more forecastable than asset returns. Another notable characteristic of volatility is the negative and asym- metric relationship between returns and volatility.*

High volatility over the recent past tends to be followed by high volatility in the near future. We achieve this by leveraging the portfolio at times of low volatility, and scaling down at times of high volatility. Effectively the portfolio is targeting a constant level of volatility, rather than a constant level of notional exposure. Conditioning portfolio choice on volatility has attracted considerable recent attention. The financial media has zoomed in on the increasing popularity of risk parity funds. While most of the research has concentrated on equity markets, we investigate the impact of volatility targeting across more than 60 assets, with daily data from We find that Sharpe ratios are higher with volatility scaling for risk assets equities and credit , as well as for portfolios that have a substantial allocation to these risk assets, such as a balanced equity-bond portfolio and a risk parity equity-bond-credit-commodity portfolio. Risk assets exhibit a so-called leverage effect, i. Historically such a short-term trend strategy has performed well; see e. Hamill, Rattray, and Van Hemert For other assets, such as bonds, currencies, and commodities, volatility scaling has a negligible effect on realized Sharpe ratios. Under reasonable investor preferences, a thinner left tail is much preferred for a given Sharpe ratio. The outline of this paper is as follows. In Section 1, we discuss the data, volatility-scaling methods, and statistics used for comparing the performance of unscaled and volatility-scaled portfolios. In Section 2, we focus on US equities, for which we have data starting in In Section 3 we study US bonds and credit, and in Section 4 we look at 50 global equity indices, fixed income, currency, and commodity futures and forwards. The analyses for the multi-asset balanced and risk parity portfolios are covered in Section 5. In Section 6, we discuss the leverage effect to provide further insights as to why the Sharpe ratio of risk assets is improved by volatility scaling. We offer some concluding remarks in the final section and comment on methods other than volatility scaling that may improve the Sharpe ratio and left-tail risk of a long-only portfolio. ARCH is autoregressive conditional heteroscedasticity.

## Chapter 4 : Volatility - Wikipedia

*Volatility is a statistical measure of the dispersion of returns for a given security or market index. Commonly, the higher the volatility, the riskier the security.*

However, for most practical pricing models, such as a binomial model, this is not the case and vega must be derived numerically. When forced to solve for vega numerically, one can use the Christopher and Salkin method or, for more accurate calculation of out-of-the-money implied volatilities, one can use the Corrado-Miller model. The reason is that the price of an option depends most directly on the price of its underlying asset. Implied volatility is so important that options are often quoted in terms of volatility rather than price, particularly between professional traders. The implied volatility of the option is determined to be the price of the option. The reason is that the underlying needed to hedge the call option can be sold for a higher price. As a price [edit] Another way to look at implied volatility is to think of it as a price, not as a measure of future stock moves. In this view, it simply is a more convenient way to communicate option prices than currency. Prices are different in nature from statistical quantities: A price requires two counterparties, a buyer, and a seller. Prices are determined by supply and demand. Statistical estimates depend on the time-series and the mathematical structure of the model used. It is a mistake to confuse a price, which implies a transaction, with the result of a statistical estimation, which is merely what comes out of a calculation. Implied volatilities are prices: Seen in this light, it should not be surprising that implied volatilities might not conform to what a particular statistical model would predict. However, the above view ignores the fact that the values of implied volatilities depend on the model used to calculate them: Thus, if one adopts this view of implied volatility as a price, then one also has to concede that there is no unique implied-volatility-price and that a buyer and a seller in the same transaction might be trading at different "prices". Non-constant implied volatility [edit] In general, options based on the same underlying but with different strike values and expiration times will yield different implied volatilities. There exist few known parametrizations of the volatility surface: Schonbuscher, SVI, and gSVI as well as their de-arbitraging methodologies. Volatility instruments [edit] Volatility instruments are financial instruments that track the value of implied volatility of other derivative securities. There are also other commonly referenced volatility indices such as the VXN index, Nasdaq index, futures volatility measure, the QQQ volatility measure, IVX - Implied Volatility Index, an expected stock volatility over a future period for any of US securities and exchange-traded instruments, as well as options and futures derivatives based directly on these volatility indices themselves.

## Chapter 5 : Volatility - Wikipedia

*Volatility is a measure of the ease of vaporization of gasoline, which is adjusted in the production process to account for seasonal and altitude variations in the local market. Properly formulated gasoline helps engines to start in cold weather and to.*

## Chapter 6 : Volatility | science | calendrierdelascience.com

*Reducing the Risk of Black Swans: Using the Science of Investing to Capture Returns with Less Volatility, Edition [Larry Swedroe, Kevin Grogan] on calendrierdelascience.com \*FREE\* shipping on qualifying offers.*

## Chapter 7 : What is VOLATILE? definition of VOLATILE (Science Dictionary)

*Volatility (chemistry) a measure of the tendency of a substance to vaporize Relative volatility, a measure of vapor pressures of the components in a liquid mixture Volatiles, a group of compounds with low boiling points that are associated with a planet's or moon's crust and/or atmosphere.*

**Chapter 8 : Volatility | Definition of Volatility by Merriam-Webster**

*Reducing the Risk of Black Swans: Using the Science of Investing to Capture Returns with Less Volatility (a review)*  
*Reducing the Risk of Black Swans: Using the Science of Investing to Capture Returns with Less Volatility ( ed; originally published in ).*

**Chapter 9 : What is Volatility? definition and meaning**

*Volatility is a widely used term in political science, but even the most widely used measure of volatility, Pedersen's index, can mask as much as it reveals.*