Short answers to some of the hardest issues facing

investors today

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*Dreams are my reality/ The only kind of reality/*

*Maybe my foolishness is past/ And maybe now at last/*

*I see how a real thing can be.*

Vladimir Cosma & Jeff Jordan (1982)

*We swallow with one gulp the lie that flatters us,*

*and drink drop by drop the truth we find bitter.*

Denis Diderot (1713-1784)

*We are our worst enemy in the financial markets,*

*with our visceral fear of being free to invest*

*and responsible for our decisions.*

JMC & CPdM

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# Foreword

Over the last seven years, we have gotten into the habit of regularly meeting around a good table to talk about the past, dream of the future, and discuss our successes and failures as modest investors. As we all discover, to live is to act! Life consists of investing in multiple activities: the study of the disciplines with which one identifies; the discovery of the meaning of life and the consequences that flow from it; the search for harmony, family and social peace; the education and support of children and grandchildren; finally, the progress of science, the exploration and enhancement of the laws of nature. So all human activity is ultimately an... *investment*!

In all these areas, each of us acts directly – through his projects, decisions, actions and the consequences that flow from them – or, indirectly, by joining in the projects, decisions and actions that others initiate and carry out. “If you can’t beat them join them…” Of course, human life, whatever its dimension, is the result of chance (random mutations) and necessity (natural selection). But it is also, and above all, the result of the choices we make freely, the opportunities that we seize and transform into as many steps towards success (happiness?).

Over the past two decades, the digitalization and acceleration of the financial world has led to the *virtualization* of business investing – a fundamental vector for the transformation and prosperity of society. It has become as easy to participate in the creation and development of commercial, industrial and financial activities at the edge of the world, as in our immediate environment. Conversely, others can easily join the projects that are emerging in our neighborhood. This new liberty offers endless *opportunities* to contribute to the common good. But, it is also a source of uncertainty and risk.

It is to the latter that we dedicate this short book. You will find here, in all candor, precise answers to the most important questions which today’s investors asks themselves, while avoiding to raise publicly. For the sake of honesty, we responded to them *independently*. It will therefore be up to you to resolve any differences in interpretation and analysis. As to us, we are sufficiently good friends and successful to live with our disagreements. A simple glance at the table of contents shows that we did not try to avoid embarrassing questions... Welcome to the “desert of the markets”, the world of risk-taking, responsible decision-making and proactive investing!

[Table of Contents](#_Table_of_contents)

# Table of contents

[Foreword](#_Toc31723903)

[Table of contents](#_Toc31723904)

[Are financial markets efficient?](#_Toc31723905)

[Do managers care about shareholders?](#_Toc31723906)

[Can one trust public authorities (politicians)?](#_Toc31723907)

[How to decide when facing irrationality?](#_Toc31723908)

[How valid are financial statements?](#_Toc31723909)

[Are algorithmic trading systems a threat?](#_Toc31723910)

[What are the best investment heuristics?](#_Toc31723911)

[How to anticipate quarterly results?](#_Toc31723912)

[Do social media influence financial markets?](#_Toc31723913)

[Are short sellers friends or foes?](#_Toc31723914)

[Should investors use financial leverage (debt)?](#_Toc31723915)

[To print or not to print (money)?](#_Toc31723916)

[Are Central Banks independent?](#_Toc31723917)

[Are investors rational?](#_Toc31723918)

[How to counter financial “IED’s” (Black Swans)?](#_Toc31723919)

[What is the real power of rumors and fake news?](#_Toc31723920)

[How reliable are analysts, experts, brokers?](#_Toc31723921)

[What do we know that we don’t know?](#_Toc31723922)

[Do chance and necessity explain the market?](#_Toc31723923)

[What don’t we know that we know?](#_Toc31723924)

[Are financial markets rationally intelligible?](#_Toc31723925)

[What are ETFs (inverse, leveraged) good for?](#_Toc31723926)

[How do growth prospects affect valuation?](#_Toc31723927)

[Is it reasonable to want to beat the market?](#_Toc31723928)

[Concluding remarks](#_Toc31723929)

[Authors](#_Toc31723930)

# Are financial markets efficient?

*Jean-Marie Choffray*

Price formation in the financial markets is based on a continuous trial and error process leading to the estimation of the marginal value of an asset: stock, bond, currency or derivative. The observation of a given price is therefore only one point in a series whose dynamic evolution results from complex and multidimensional factors: historical, political, economic, social, technological and managerial. If we mean by efficient the fact that this point estimate of price integrates all the information available – past, present and future – it is evident that the markets are not. However, they seem to adapt remarkably well to information flows by correcting their past excesses, over or underestimation of the value or assets. Markets that rely on (1) free transactions, (2) access to valid and reliable sources of information and (3) fluidity of the underlying contracts, appear to demonstrate a lot of intelligence if not wisdom. [Economic theory](https://www.amazon.com/Capitalism-Freedom-Anniversary-Milton-Friedman/dp/0226264211/ref%3Dsr_1_1?keywords=capitalism+and+freedom&qid=1580039951&sr=8-1) suggests that no authoritarian (centralized) pricing system can lead to a more optimal allocation of available resources, insofar as there is necessarily more intelligence in the minds and behavior of many free and well-informed participants than in those of a small group of elected officials. Hence, more than being efficient in the short run, financial markets do appear to reflect a kind of common wisdom.

*Charles Pahud de Mortanges*

NO! Citing a well-known quote from Warren Buffett:” I’d be a bum on the street with a tin cup if the markets were always efficient.” What does Buffett (one of the most successful investors in recent times) mean by this? Obviously, that markets are NOT always efficient. The Efficient Market Hypothesis (EMH), assumes that share prices reflect all available information and that it is impossible for investors to generate excess returns. Eventually, stocks always trade at their “fair” value, making it impossible for investors to either buy undervalued stocks, and/or sell stocks that are overvalued. If this were the case, why participate in the markets at all? Save for the dividends - if issued. I am mostly a Value Investor, following an investment strategy that involves buying stocks that appear under-priced by some form of fundamental analysis (e.g. Discounted Free Cash Flow, DFCF). Through DFCF, I can get a rough estimate of a stock’s intrinsic/fair value. If the stock’s intrinsic value is greater than the market value, I would consider buying it, because there is a certain “Margin of Safety”. If financial markets were indeed efficient, none of this would make sense. Sometimes, stocks enjoy great popularity (a “Keynesian beauty contest”), often completely separate from their fundamentals, but showing strong upward-trending prices. Example: Tesla (TSLA) today (January 2020).

[Table of Contents](#_Table_of_contents)

# Do managers care about shareholders?

*Charles Pahud de Mortanges*

Do they have to? Having been a shareholder during various times of my life and of a variety of public companies, I am inclined to say NO. Despite their obligation to maximize “shareholder value”, most senior managers are first and foremost concerned about their own remuneration (including bonuses!) and…to survive. It is a common assumption that shareholders are the owners of the company; they are not. In pure legal terms, shareholders have a claim on earnings. Shareholders do not have a final say over most big company decisions. But, boards of directors do. That is the reason why so-called “activist shareholders” obtain enough shares to demand a seat on the board of directors and are thus able to directly influence corporate strategy. In addition, managers do not have a real incentive to care about shareholders. Shareholders are often widely dispersed around the country, or the world, and generally do not attend the annual meetings, or bother to fill out a proxy. The shares they own about the company in question are often a small part of a larger diversified portfolio. Finally, most shareholders lack the knowledge and skills to have a well-rounded opinion on management performance. Be aware if one or more members of the board of directors have “friendly relations” with the CEO.

*Jean-Marie Choffray*

Investing rests upon an interesting paradox: what managers gain is usually lost by shareholders and vice versa. So, officers want to spend today to maybe make money tomorrow, while investors want to make money today to maybe spend tomorrow! Resolving such a conflict of interest requires intelligence, patience, and trust. Involving managers in the sharing of a company’s capitalization through stock option grants is one way. Delivering reliable and valid financial information to shareholders is another. Any disagreement between officers and investors is detrimental to a business. History teaches that "the fish rots from the head ». In case of serious conflict, managers should be dismissed or key investors leave (sell short?). Executives, shareholders and self-proclaimed pundits are generally poor judges of the economic value of a business. Share buybacks and short sale – volume, ratio, percent of float – are rarely made at the right time and/or at the right price. Shareholders, investors, and savers are doomed to remain alone, irremediably alone, in the fog of the markets! As an investor, you know for sure that nobody – nobody! – will ever defend your interests. The sooner you accept it, the faster you will get rid of the illusion that others care about your savings! Without a doubt, [Jean de la Fontaine](https://lyricstranslate.com/en/la-cigale-et-la-fourmi-cicada-and-ant.html) was right…

[Table of Contents](#_Table_of_contents)

# Can one trust public authorities (politicians)?

*Jean-Marie Choffray*

Public authorities and political leaders often inherit the difficult situations they face. As long as they maintain social peace, they discharge their most important responsibility. In a democratic regime – the least bad of political systems – they have no choice but to please the majority, which is not only made up of enlightened and responsible minds. To survive and keep their lucrative jobs, they don't hesitate to “lie when things get serious” (J.-C. Juncker) or to “tell the truth when they are no longer running for president” (B. Obama). Public authorities and political leaders do not have a monopoly on intelligence, wisdom, generosity, and kindness. History teaches that, in the best of cases, they serve their fellow men only insofar as their personal interests are not negatively affected. It is therefore essential to take their speeches and words cautiously, paying attention only to the facts and policies that flow from them. Hence, savvy investors should never pay attention to political noise, but concentrate on the laws, regulations, texts and behaviors that result from it. Free intelligence and individual sense of responsibility – accountability – are the worst enemies of despots, reminds A. Huxley in [Ends and Means](https://www.amazon.com/Ends-Means-Inquiry-Nature-Ideals/dp/1412847443/ref%3Dsr_1_1?keywords=huxley+ends+and+means&qid=1580041871&sr=8-1). “Who gives to the poor lends to God; who gives to the State makes people laugh” (P. Bernard).

*Charles Pahud de Mortanges*

A leading question? According to sociologist/political economist Max Weber (1864-1920), the true political leader has three qualities: passion (a commitment to the matter at hand, or the passionate dedication to a cause); a feeling of responsibility (owning the results of their actions); and a sense of proportion (an acute awareness of the realities). Weber: “Those destined for political leadership must have strength of character (ethics); and a deep sense of purpose and responsibility.” We all know that today (2020), NO politician in whatever country possesses all those qualities, or adheres to those standards. The political arena is a very tough and hostile environment, where the weak perish quickly. To survive politicians lie consistently; fake sincerity and amiability, and empty promises for the sole purpose of getting re-elected. A politician’s inaccurate statements are either intentional lies meant to mislead the public, or they confirm that those who are supposed to be in charge of oversight have no idea what they are supposed to oversee - especially in the area of finance! Whether whole governments can be trusted is a matter of geography. Both the Swiss and Canadians have considerable trust in their governments; the Greeks much less so. Whatever your location, be vigilant and sceptical about trusting public authorities.

[Table of Contents](#_Table_of_contents)

# How to decide when facing irrationality?

*Charles Pahud de Mortanges*

Irrationality is all around us, all the time. Economic models still assume, a “homo economicus” always acting perfectly rationally, i.e. in his/her own best interest, making unbiased choices based on all available information. On that subject, I have always liked the quote attributed to John Maynard Keynes: “Markets can stay irrational much longer than you can stay solvent.” Economist Robert Shiller even wrote entire book on the topic entitled *Irrational Exuberance*. My main point: People are not rational and most economic models are wrong. Actually, individuals operating in the financial markets are usually quite emotional and irrational. Together, these irrational individuals can create market trends and valuations that are far removed from a company’s fundamentals like earnings and cash flows. The price of the stock becomes a highly predictable reality, as investors continue to boost the perceived trend. What to do? 1). The trend is your friend, i.e stay with the trend as long as you can. Technical Analysis (MACD, RSI) can give you some indication when the trend may reverse. 2). Fundamental Analysis: Look at some key ratios to get an idea about the company’s growth, profitability and overall financial health. Try to get some idea of what the company should be worth. If the value per share as per your calculation is far lower than the market value (today’s stock price), stay away!

*Jean-Marie Choffray*

In simple terms, [Arrow’s impossibility theorem](https://www.sciencedirect.com/science/article/pii/S0315086018300508) states that it is impossible to formulate a social ordering (group utility or value function) without violating some basic precepts of rational choice and decision-making. That is, however, what financial markets do every day with all asset classes (stocks, bonds, currencies and derivatives). Market prices express on a [ratio-scale](https://www.mymarketresearchmethods.com/types-of-data-nominal-ordinal-interval-ratio/) the preferences of an unspecified number of investors, evaluating an unspecified number of alternatives, on an unspecified number of criteria, each of them partially stochastic (due to imperfect information). Observed prices have every chance of being irrational, particularly if they don’t take into consideration the intentions, disguised objectives and stealth strategies of stakeholders. In such circumstances, searching for optimal investments is doomed to failure. The unintelligible adversity that characterizes markets should lead rational decision-makers to (1) define a short-term performance objective, (2) assess the likelihood that each possible investment can reach it given its fundamentals and market behavior, (3) choose the most promising alternatives, (4) sell, without any hesitation, as soon as the objective is reached, or the market does not behave as expected. Truth be told: it’s never a mistake to make money in the market!

[Table of Contents](#_Table_of_contents)

# How valid are financial statements?

*Jean-Marie Choffray*

“A fool and his money are soon parted!” In the financial markets, it's wise to assume (H0: Null hypothesis) that if someone can steal your money, he will. To reduce risk, one must understand the fundamentals of target businesses as they appear in their financials and their [SEC filings](https://www.sec.gov/edgar/searchedgar/companysearch.html). Statistical theory teaches that a reliable measurement is not necessarily valid. And, the [Uncertainty Principle](https://www.britannica.com/science/uncertainty-principle) of Heisenberg, states that the position (financial health?) and the velocity (future growth?) of a particle (a company?) cannot both be measured exactly at the same time. The economic reality of a business is doubly uncertain, in its state and its measurement. Financial statements are as much a reflection of actual performance as of the choices made by managers in terms of work in progress, depreciation, transfer pricing, consolidation, etc. Experience suggests that one can only trust them to the extent that they show a strong coherence over time. “The letter kills, the spirit gives life” (Ambrose). Investors should watch the evolution of the following ratios: short-term assets/short-term debts (liquidity); assets/equity (leverage); capitalization/assets (valuation); operating cash flow/equity (productivity). As for managers' perceptions, intentions and promises, we should give them the importance to which financial history invites us: not much!

*Charles Pahud de Mortanges*

They should reflect the truth. Every registered company must keep written records that disclose its business activities and financial performance. Financial statements of public companies are always audited by accountants and others to ensure accuracy. An investor, when examining officially filed financial statements, has to assume that those statements are correct. Still, company financial statements can contain unintentional errors, as well as misrepresentations. Both have an effect on stock prices. Recently, a medical device company corrected an unintentional error in their reporting, causing an immediate 10% drop in the price of the stock. When the numbers simply don’t add up, you probably have a case of financial statement misrepresentation and you should be on the alert. American energy company Enron claimed consistent annual revenue growth of almost 60%, outperforming all other major international blue-chip companies (a red flag!). Not surprisingly, this “outstanding performance” was mostly the result of financial statement manipulation, as many of Enron's recorded assets and profits were either non-existent, or grossly inflated. We often lament the fact that, so few people are ever held accountable for their actions. But not this time: Enron filed for bankruptcy, the accounting firm (Arthur Anderson) was dissolved, both the COO and CFO went to prison, and the CEO died before sentencing.

[Table of Contents](#_Table_of_contents)

# Are algorithmic trading systems a threat?

*Charles Pahud de Mortanges*

Most of us individual investors are trying to compete against machines. Algorithmic trading, accounts for more than 80% of all trading volume. We constantly see big moves up, or down – not determined by human traders competing on the basis of skill and knowledge. But by “headline searching” algorithms, used by (large) institutional investors, who buy and sell on a large scale. As these algorithms are looking for the slightest signal of potential profit, the results (up or down) can be totally unrelated to the fundamentals of a given business. What can individual investors do against the algo machines? Nothing! The system is rigged in their favor. What we do see however, as an outcome of algo trading, is increased volatility. Large moves up and down – sometimes instantly. Consequently, valuations can become irrationally high, or irrationally low. Accept it, this is the “new normal”. Take advantage of what the market gives you. When you can buy a company at an attractive price, just hold it as long as there is significant (potential) growth and ROIC is sufficiently greater than WACC. And don’t worry about it. Leave things alone. Own great stocks for as long as you feel comfortable with it, because you really don’t have much of an alternative.

*Jean-Marie Choffray*

There are two broad families of [Intelligent Systems](https://www.amazon.com/gp/product/2091921246/ref%3Ddbs_a_def_rwt_bibl_vppi_i9): (1) those that are based on an analytic expression of knowledge (mathematical models) and call upon statistics to calibrate them on past data, and (2) those that are based on a symbolic expression of knowledge (a set of heuristics) and use an inference engine to build, by deduction and/or induction, a pseudo-reasoning from established facts. The former are effective in describing and predicting continuous phenomena. The latter allow integrating discontinuities in the analysis and anticipation of complex processes. Modern finance uses both, but mainly analytical systems. Human beings, “mind and flesh” investors, are hybrid intelligent systems, constantly combining the two approaches. Until proven otherwise, no computer program, whatever its complexity, can match their level of intelligence, in particular for integrating in groups complex phenomena related to the psychology, the intentions, and the objectives – expressed or concealed – of those with whom they interact. No intelligent system can “feign to feign”, what short-sellers do daily! Hence, algorithmic trading systems pose no vital threat to competent investors. They only contribute – which is very valuable! – to market liquidity. Interestingly, sometimes they also betray their creators… Welcome to the robots!

[Table of Contents](#_Table_of_contents)

# What are the best investment heuristics?

*Jean-Marie Choffray*

There are two heuristics that any performance-minded investor should keep in mind: (1) under all circumstances, protect assets, and (2) never forget heuristic (1). Protecting assets is not a goal, it’s a constraint. This is why investors should always keep a significant portion (+/- 50%) of their Assets Under Management (AUM) in liquid form. Why not in cash? Three other heuristics come to mind: (3) invest only in well-managed businesses (check their [financial statements](https://www.nasdaq.com/market-activity/stocks/msft/financials)), or in businesses that offer credible growth stories that make potential investors dream; (4) carefully respect their quarterly cycle and avoid – except in special situations – being invested when they publish their results; (5) sell when you have reached your valuation goal, as markets bring new and interesting opportunities every day. Also, forget your ego. There is no point in being right or wrong. The “rule of the game” is to help the market correct its mistakes while making money. Finally, (6) never allow yourself to be influenced by family, friends, experts, and professors (?), while listening respectfully to their comments, and (7) work hard, very hard, diligently and intelligently. It’s because many people find it fun to play the market that it’s possible to take their money! Remember: wealth never disappears, it simply changes address!

*Charles Pahud de Mortanges*

Heuristics are a set of rules that come from experience, like the process of elimination, or doing by trial and error. The outcomes are not guaranteed to be optimal, perfect or rational, but it is often sufficient to reach preliminary conclusions about certain situations (e.g. when investing). I would consider the following heuristics highly relevant: Do what works for you and not what anyone else does and thinks. Don’t try to buy at the bottom and sell at the top. This can’t be done, except by liars. (Bernard Baruch). Know the business (stock) that you own, and why you own it. Take responsibility for all your investment decisions, good *and* bad. Be prepared to lose money and know why you did. Admit your mistakes; the only way to avoid mistakes is not to invest — which is the biggest mistake of all. Never fight the market. Instead, carefully monitor market dynamics and adjust investment strategies accordingly. Asset protection and financial survival is your main goal. Consider companies with substantial positive cash flows and where the Return on Invested Capital (ROIC) is significantly greater than the Cost of Capital (WACC). Earnings growth should be greater than operational growth and Return On Equity (ROE). See also our earlier paper [*Protecting Assets Under Non-Parametric Market Conditions*](https://orbi.uliege.be/handle/2268/168479) (2015).

[Table of Contents](#_Table_of_contents)

# How to anticipate quarterly results?

*Charles Pahud de Mortanges*

Quarterly earnings reports contain important financial information for the active investor. These quarterly updates may provide an indication on how the stock will likely be valued in the future. You would expect stock prices to rise when earnings results exceed market expectations (e.g. analysts’ estimates), while disappointing earnings may result in lower share prices. But beware, this is not always the case. If the decrease in earnings is less than the analysts’ estimates, the stock price may still go up. Similarly, if the increase is less than expected, the price may go down. Brokers, banks and certain financial publications use a consensus of earnings estimates made by a number of analysts who follow the company closely. The median estimate then becomes the basis for comparison. But the fact remains, you simply never know how the market will react - especially in an environment of automated trading. In some cases, the stock quickly recovers from the decline so it would be OK to do nothing. Also, long-term investors may not be affected by a single quarter of disappointing earnings. But if you are more short-term focused, and you expect the stock price to fall regardless of the quarterly results, then by all means sell your position just before the results are announced. See also our earlier paper [*Protecting Assets Under Non-Parametric Market Conditions*](https://orbi.uliege.be/handle/2268/168479) (2015).

*Jean-Marie Choffray*

In the markets, I have learned to be wary of my perceptions and reactions. How could I possibly trust those of others? Quarterly results provide an interesting example. When analyzed thoroughly, they are as much the result of a company’s real performance as of the accounting and strategic choices made by its officers. I think that they are largely unpredictable, as the market’s reaction following their release. Two key “time intervals”, however, may offer short-term opportunities: the period that lapses between the quarterly results announcement and the conference call; and the short time that follows directly the conference call, when the growth prospects (guidance) outlined by its managers contradict the published results. Analysts' estimates, on the other hand, are always notable. In addition to reflecting their possible knowledge of a business and its sector, they reveal a company’s actual concern for informing investors. Hence, pay attention to the regularity with which businesses exceed analysts' expectations in the past. It's probably the best predictor of the likelihood that they will continue to do so. As to the comments, wishes and future plans of managers, they are generally not worth more than their weight of words! Events that did not happen in the past, however, can sometimes be good predictors of what’s to come!

[Table of Contents](#_Table_of_contents)

# Do social media influence financial markets?

*Jean-Marie Choffray*

One need only look at the behavior of young people, constantly looking at their smart phones, to be convinced of the importance that virtuality takes over reality. This quest for "above ground" happiness is an irrefutable indication that [Aldous Huxley](https://www.amazon.com/Brave-New-World-Aldous-Huxley/dp/0060850523/ref%3Dsr_1_1?keywords=huxley+brave+new+world&qid=1580216308&sr=8-1) was not completely mistaken! The markets, however, will always remain anchored in the radicality of the human condition: beings who live in society, by and for others. Thus, as long as men accept (seek?) to deceive their fellow citizens to increase their wealth and consolidate their power, financial markets will be necessary to appreciate the economic value and organize the sale of their assets. Insofar as the trial-and-error process upon which they rest largely relies on the behavior of crowds whose irrationality is established, we can fear that hordes of speculators connected through social networks will inevitably cause some disruptions (flash crashes?). As long as these movements do not drain liquidity, they will remain largely harmless. Better, they will offer short-term opportunities for savvy investors. The limited interest generated today by Virtual Investment Lounges and other Stocktwits Premium Rooms seems to support this thesis, even if the future in this area remains unknown.

*Charles Pahud de Mortanges*

I am not a user of social media. But I *am* fully aware that markets are impacted by emotional reactions. Today, people operating in the world of finance communicate information almost exclusively via the Internet. People active on social media express their opinions and emotions freely (and sometimes anonymously!) via tweets, posts, etc. At the very same time, they are influenced by the sentiments expressed by others which, in turn, may affect their own actions (in the financial markets). Algorithms can detect information (e.g. on social media) that could impact the economy and/or individual businesses. Example: In 2013, activist investor Carl Icahn, announced on Twitter his purchase of Apple stock, and tweeting that it was significantly undervalued. Within minutes Apple gained $17 billion in market cap. On the down side: There was a serious train collision in the U.S. in 2016 involving railroad operator CSX Corporation. Local residents started tweeting about the accident and within 90 minutes CSX lost $500 million in market cap. Current U.S. president Trump, a heavy user of Twitter (about 10 tweets a day, with almost 64 million followers!) tweets frequently on trade issues and interest rates. Still, the impact of Trump tweets seems limited: Out of about 4,000 tweets, sent during market hours in 2018 and 2019, only 146 moved the market. I believe that at best, social media can make you aware of an opportunity, or a threat - if the content of the message is true.

[Table of Contents](#_Table_of_contents)

# Are short sellers friends or foes?

*Charles Pahud de Mortanges*

You are a short seller when you borrow a certain number of shares from your broker/bank and sell them immediately, while agreeing to buy the shares back at a later time (hopefully at a lower price), return them to the broker and pocket the difference. As the term implies, short sellers SELL the stock causing the stock price to decline further, creating perhaps a buying opportunity for the rest of us. Conversely, when the stock price goes up, short sellers need to cover their short positions and be forced to buy the stock causing the price to go up. Short sellers are supposed to have the knowledge and expertise to determine whether a stock is overvalued, or whether something is not going right for the company. In that case, short sellers make the market more efficient. However, the financial crisis (2008) has shown that short selling may have devastating implications for the stock market as a whole. Massive short selling can take a normal stock market dip and turn it into a crash. If enough investors decide to short a particular company's stock, they can literally force the company into bankruptcy. Short sellers were significant factors in the fall of certain financial institutions during the financial crisis and short selling was briefly banned in 2008. So, a short seller can be your friend by creating certain opportunities, or a foe by making a bad situation worse.

*Jean-Marie Choffray*

The market is the place where two major forces clash: those who buy assets that they can’t afford (buying on margin), and those who sell what they don’t own (selling short). The latter play an important role in that they help curb the enthusiasm of optimists, who have a tendency to build houses of cards. Short selling poses a conceptual problem to many who imagine that markets are made to go up indefinitely, an image peddled by fortune tellers and other ideologically imbued politicians. The reality is much simpler. These two symmetrical forces act together to discover the price – through an endless trial and error process – which best represents the equilibrium between supply and demand, constantly disturbed by multiple sources of uncertainty spanning different time horizons. These forces make it possible to integrate the most complex assumptions in terms of future performance and growth. Short sellers are, therefore, lookouts, particularly useful in the most euphoric times. Indicators such as Shares Short, [Short Ratio](https://www.investopedia.com/articles/01/082201.asp) and Short Percent of Float provide valuable information on the likelihood of a correction if reality turns out to be more favorable than expected (Short Squeeze?). Short sellers are definitely more friends than foes. Often, they pay a heavy price for rowing against the tide and warning us.

[Table of Contents](#_Table_of_contents)

# Should investors use financial leverage (debt)?

*Jean-Marie Choffray*

Whatever their activity, most people and businesses are tempted to increase performance by resorting to debt. At big hedge funds and shadow banks – which have levers (debt/equity) ranging from 2 to 7 depending on the nature of their activity and their assets – debt management has become a core business. As they soon learn – financing being mostly marketing! – the problem is not so much to go into debt as to no longer be able to refinance and contract more debts! A market downturn, a weakening of liquidity, is enough for sales induced by restrictive covenants to trigger a devastating process and a collapse in the value of their remaining assets. At this stage, only the intervention of Central Banks can save the day! An individual investor, however, can never count on such generosity from his banks or his brokers (always have at least two of each!). If necessary, they will make “forced sales” on his account to restore balance and reduce risk. If he wants to sleep well, the optimum level of debt for an individual investor is close to zero, at the exclusion of short periods of time during which he wishes to have a little more leeway. Ideally, such periods should remain brief and lead him to offset his risk through an inverse (leveraged?) [Exchange Traded Fund](https://etfdb.com/screener/) (ETF) or an option. The key is to avoid being hurt badly by unexpected “killer waves”!

*Charles Pahud de Mortanges*

NO! Debt is a bad thing. Many countries, companies and inviduals (students!) are deeply in debt. And you can rest assured, there will come a reckoning one day. Borrowing money from your broker/bank to buy stocks, and using them as collateral, is very risky. I never did and never will. Warren Buffett once joked, there are 3 ways an otherwise intelligent person can go broke - all starting with the letter “L”: Liquor, Ladies, and Leverage. I agree - on all three counts! The U.S. Securities & Exchange Commission (SEC) has a full page on their website <https://www.sec.gov/reportspubs/investor-publications/investorpubsmarginhtm.html> explaining how leverage (margin) works and the risks when the market turns against you: You can lose more money than you have invested; You may have to deposit additional cash or securities in your account on short notice to cover market losses; You may be forced to sell some or all of your securities when falling stock prices reduce the value of your securities (your collateral!); and your bank/brokerage firm may sell some or all your securities without informing you to pay off the loan it made to you. Lesson: Don’t be greedy, don’t get into debt - even though it may look very tempting at times. It’s important to be able to sleep well at night!

[Table of Contents](#_Table_of_contents)

# To print or not to print (money)?

*Charles Pahud de Mortanges*

Surprise! Central Banks do NOT have a printing press in their basement. Central banks buy bonds and other securities from banks and then credits the banks’ accounts. So yes, that is a bit like printing money, as banks now have more money to lend out to companies and individuals. This, in turn, will (in theory) stimulate growth in the economy and lower unemployment. This has happened on a massive scale (called Quantitative Easing, QE) since 2008. In addition, interest rates are at all-time lows (0%) making it extremely attractive for businesses to borrow. However, it appears that companies have borrowed mostly to buy back their own stock and pay off debt. Very good for shareholders (the markets love QE!), but not for economic growth and inflation has remained below expectations. Difficult to estimate, but one might ask what would have happened if the U.S. and the U.K. had not embarked on a course of (several) QEs. We can look at Europe, where the European Central Bank (ECB) started its large-scale QE program only in 2015 to prevent ultra-low inflation from further damaging the euro-zone economy still recovering from the debt crisis. Looking at the economic situation today (2020), one could say that “to print money” was successful, but not in all areas. It is questionable whether a tool like QE can be employed again at the next economic downturn as central banks have run out of ammunition.

*Jean-Marie Choffray*

Since the great recession of 2008, the world has gone through an unprecedented monetary experience which has led the main Central Banks to issue more than a quarter of the world's capitalization (+/- $ 90 trillion) in new means of payment (+/- $ 25 trillion). To everyone's surprise, this monetary injection (fake currency?) has not yet found its way into everyday inflation (Faulty Indices? [Liquidity Trap](https://www.investopedia.com/terms/l/liquiditytrap.asp)?) even if it’s perfectly measurable in the price of financial assets. As I pointed out recently to an economist friend who seemed to disavow the theory that he teaches, it’s not in the price of beer that inflation is observed today, but in that of the brewers (their valuation)! The market capitalization of the FAANG stocks (Facebook, Apple, Amazon, Netflix and Google) represents on average more than four times their income and six times their assets. Together, it’s bigger than the GDP of the world’s fourth largest economy! Such levels are unsustainable in view of current and expected global growth trends. Non-performing businesses (“zombie companies”) are headed for hard times. Even if the earth is round, one cannot hope to kick the monetary can indefinitely! A wake-up call is inevitable and will necessarily be painful. Its dreadful name is well-known: [stagflation](https://en.wikipedia.org/wiki/Stagflation) – the economic equivalent of cancer! Time to protect your assets?

[Table of Contents](#_Table_of_contents)

# Are Central Banks independent?

*Jean-Marie Choffray*

Just follow President Trump’s tweets, read Chancellor Merkel’s innocuous remarks, or reconstruct the intellectual and political journey of key central bankers to measure the low degree of independence of their decisions. History reveals that this has always been the case. Since the Money Supply represents short-term debt – I Owe You (IOU) – it would be naive to imagine that political leaders would willingly renounce such an instrument of power (weapon of mass destruction?). Confidence and convertibility form the basis of the strength of any currency. Unfortunately, the world’s history is inflationary (cf. [W. & A. Durant](https://www.amazon.com/Lessons-History-Will-Durant/dp/143914995X/ref%3Dsr_1_1?keywords=the+lessons+of+history&qid=1580050672&sr=8-1)), and only a fool would see in fiduciary money a long term store of value! Any debt issuer – short or long term – has no other choice than to repay it, get rid of his creditors, or kick the can further. This is why Monetary Unions are neither more sincere, nor more lasting, than military pacts. They usually collapse because the most effective way to take hold of a country has always been to destroy its currency. Since the dawn of times, people have faced a Cornelian dilemma: to print or to work? History suggests that they prefer to print! The key to our future, therefore, lies in the [yield curve](https://fred.stlouisfed.org/series/T10Y2Y) and the evolution of the [exchange rates](https://finviz.com/forex.ashx) of the main reserve currencies – Dollar, Euro, Yuan, Yen, and Pound. Fasten you seat belt!

*Charles Pahud de Mortanges*

To me, as an academic, this question evokes a number of other questions: Is there a significant difference between *de jure* independence and *de facto* independence? What kind? Financial independence? Policy independence? Personnel independence? The heads of central banks in the U.S. and others are appointed by political processes. For that reason, president Trump believes that the central bank (Federal Reserve) should support his economic policies and proposals. This is not new, numerous American presidents (Truman, Nixon) have tried to interfere with central bank policies. In Turkey, president Erdogan has repeatedly interfered with central bank policy by demanding lower interest rates. As an authority that controls a country's currency, money supply and interest rates, as well as being in charge of overseeing the commercial banking sector, it is obvious that a central bank must be independent from political meddling. History shows that central bank independence is often related to the state of the economy. During the 2008 financial crisis the U.S. and EU central banks gained enormous power, mostly unchallenged. Now that economies have recovered politicians (mostly) feel reassured to castigate and interfere again. So, independence actually comes, and goes.

[Table of Contents](#_Table_of_contents)

# Are investors rational?

*Charles Pahud de Mortanges*

NO! “If everything on earth were rational, nothing would happen” (Fyodor Dostoevsky). As we saw above, the perfectly rational “Homo Economicus” is a hypothetical concept and does not exist. Although conceding that the supposition is unrealistic, economist Paul Krugman wrote: “Nobody, not even Nobel-winning economists, really makes decisions that way. But most economists—myself included—nonetheless find Economic Man useful, with the understanding that he’s an idealized representation of what we really think is going on.” Likewise, complete and consistent rational behavior cannot be expected from investors. The strong and persistent emergence of behavioral economics, and its derivative behavioral finance, are evidence of that. An investor is typically motivated by two fears (emotions!): the fear of missing out on an attractive opportunity, and the fear of losing money. Acting on these fears often creates a conflict between rational and emotional behavior. In my experience, no investment decision is either fully rational, or fully behavioral at all times. As we saw earlier, algorithmic trading - pre-programmed investing and trading decisions based on computer algorithms - is becoming more widespread. As emotionless machines take over, investment decisions may eventually become fully rational. To illustrate, Renaissance Technologies (one of the most consistently successful hedge funds of all time) uses extremely complex mathematical models to analyze and execute trades, most of them automated.

*Jean-Marie Choffray*

If we exclude chance and necessity, the free choice of men is the only reason for their happiness or frustration. Likewise, investors are fully responsible for their successes and failures. In the market, the causes of failure are well-known: (1) insufficient diversification of assets, (2) excessive use of debt, and (3) ignorance or disrespect for micro and macroeconomic fundamentals. Other factors have comparatively little impact on long-term performance. The nominal or relative (compared to a market index) failure of the majority of individual (institutional) investors is, therefore, an irrefutable proof of their irrationality (incompetence?). The widespread and well-entrenched feeling of “playing” the market is probably their worst enemy, leading them to consider investing as a game, a fight, rather than a scientific discipline that requires dedication, patience and sense of responsibility (ethics). As to the many “synthetic” products (e.g. Exchange Traded Funds, ETFs) which seek to distance them from risk, they might actually produce the opposite effect. A drop in market liquidity, subsequent to a change in Monetary Policy (i.e. higher interest rates, end of quantitative easing), will provide a clear warning sign. "God laughs at men who deplore the effects whose causes they cherish" ([J.-B. Bossuet](https://www.amazon.com/Discourse-Universal-History-European-historians/dp/0226067084/ref%3Dsr_1_fkmr2_1?keywords=bossuet+discourse+on+universal+story&qid=1580063438&sr=8-1-fkmr2)).

[Table of Contents](#_Table_of_contents)

# How to counter financial “IED’s” (Black Swans)?

*Jean-Marie Choffray*

In the financial markets, unthinkable, unlikely and impossible events offer investment opportunities when three conditions are met: (1) Assets Under Management (AUM) are well diversified; (2) use of debt is limited or non-existent; (3) investors maintain a strategic reserve of around fifty percent of their assets in cash or quasi-cash (“dry powder”). In these circumstances, random and inevitable shocks – internal and/or external – should lead investors to work harder to devise and implement strategies aimed at taking advantage of the singularity at hand. Short-term urgency is, therefore, always to wait patiently and diligently. The consequences of an unexpected fact or incident can only be appreciated over time. The market’s bottoming or topping out is a process, not an event. Patience is the mother of all virtues! Three key dates might help optimize an opportunistic (re)allocation of assets: the expiration date for stock-options (Options Expiration Friday); the end of the month rebalancing of institutional portfolios; and, the release of quarterly results. Other marginal events such as upgrades/downgrades, new contracts and partnerships, positive/negative research notes from credible short-sellers and investment banks, also provide sensible invitations for prudent redeployment of assets.

*Charles Pahud de Mortanges*

A black swan event, (e.g. in economics/finance), is an extremely rare, high-impact event that is almost impossible to predict. The term Black Swan was popularized by Nassim Taleb, in his book [*Fooled by Randomness*](https://www.amazon.com/Fooled-Randomness-Hidden-Markets-Incerto-ebook/dp/B001FA0W5W/ref%3Dsr_1_1?crid=1C8B3LAIVSNCK&keywords=taleb+fooled+by+randomness&qid=1580902563&sprefix=taleb+fooled+by+%2Caps%2C221&sr=8-1)(2001). He defines three attributes that are common to all black swan events: 1). The event is unpredictable (to the observer); 2). The event has widespread ramifications; and 3). After the event, people will argue that it was in fact predictable (hindsight bias). How to deal with such momentous unexpected events? Taleb himself suggests *preparing* for the impact of negative black swans and to *position ourselves* to exploit the positive ones. Rather obvious and difficult to put into practice. Besides, when we try our best to prepare for the unexpected, there are of course constraints in terms of time, and financial- and human resources. Black swan events are unique in nature and affect different asset classes differently. Therefore, the best approach to plan for the unexpected is to have a diversified portfolio of assets: stocks, bonds, (inverse) ETFs, precious metals, real estate, art…Remember, true black swan events like the 9/11 terrorist attacks in New York (2001) and the Tohoku earthquake and tsunami in Japan (2011) were totally unexpected. But, with a certain probability, many other events could have been anticipated by investors. Work intelligently and stay alert, but remember: “it’s tough to make predictions, especially about the future” (Yogi Berra).

[Table of Contents](#_Table_of_contents)

# What is the real power of rumors and fake news?

*Charles Pahud de Mortanges*

There is a difference between a rumor and fake news. The rumor may be true; fake news is always false. In investing there is an old saying: “Buy the rumor, sell the news”. When there are rumors that a company will come out with a brand-new product, financial TV and the blogosphere are dominating the airwaves speculating what the new product might look like. Investors buy the stock, expecting that the new product will be a hit. Then details about new product are officially announced (News), people like it, but the stock still sells off Why? the new product does not live up to all the hype, so the stock sells off. Or, the new product announcement fails to create a buzz. Fake news consists of deliberate misinformation (lies) through regular news channels, but especially on social media. And today the “news” is 24/7! Unless, the news item is blatantly false, fake news may have a considerable power. It seems particularly prevalent in the sphere of politics and especially during elections. But what about the financial markets? In 2013, a report was tweeted (Twitter, again!) of two explosions at the White House, injuring President Obama. The Dow Jones Index immediately dropped over 140 points. The market quickly recovered after it was determined to be fake news. However, the (temporary) decline totalled $136.5 billion in the S&P 500 alone. Fact-checking has become a must. [Marcus Aurelius](https://www.amazon.com/Meditations-Marcus-Aurelius/dp/1503280462/ref%3Dsr_1_6?crid=25320JF4SIR8&keywords=marcus+aurelius+meditations&qid=1580902643&sprefix=marcus+aurelius+%2Caps%2C222&sr=8-6) (121-180 AD) said it best: “Everything we hear is an opinion, not a fact. Everything we see is a perspective, not the truth.” (Meditations).

*Jean-Marie Choffray*

"Life is a series of lies on which we all agree" (Napoléon Bonaparte). As we all find out, sooner or later, whoever controls the present controls the past, and whoever controls the past controls the future. History is a story and, sometimes, a nightmare! Those who pretend that they know it are generally those who seek to impose their interpretation. If market behavior was fundamentally the result of chance (random mutations) and necessity (natural selection), it would be meaningless and the impact of rumors and fake news would be nil. If we postulate, on the other hand, that market behavior is mainly the result of choices made freely by intelligent stakeholders, it acquires a meaning, a direction, which makes it possible to recognize potentially positive and negative forces. Here, we approach the ethical essence of free markets. This is where rumors and fake news come into play, insofar as they have no other purpose than to take hold of the destructive behavior of crowds. If we exclude their short-term impact on the most gullible and the most incompetent, rumors and fake news generally have no lasting negative effect. They rarely change the course of history. Their impact is mostly limited to present times. Alternatively, they may provide short-term opportunities for crushing their perpetrators!

[Table of Contents](#_Table_of_contents)

# How reliable are analysts, experts, brokers?

*Jean-Marie Choffray*

Let's be honest, if financial analysts, experts and brokers – university professors? – were really competent, they would be investors themselves and not waste their time listening and advising others. Nor would they require to be paid on a commission based on the Assets Under Management (AUM) rather than on their actual performance – the only criterion that really matters! – compared to a market benchmark (S&P 500, for example). If we take into account debt leverage and Monetary Policy (future inflation?), over the long run, the best fund managers do not “beat” the market. In the majority of cases, their performance is even significantly lower, while their debt level increases risk. In times of crisis, many of them tend to reduce their sails by becoming private again. Advices from financial analysts, experts and brokers are, therefore, never more than advices. They should be considered as additional sources information that, sometimes, shed light on singular events and situations. You should never let them become your only or main cause for action. I have learned to ignore their analyses and recommendations, even if I enjoy reading them to uncover their hidden agendas and identify new opportunities. Like [Lucky Luke](http://www.lucky-luke.com/fr/morris.html), investors are poor lonely cowboys and a long away from home... They should always watch out for the gunmen behind their backs!

*Charles Pahud de Mortanges*

The need for expert financial advice may be more psychological than practical. If you act on expert advice and it is wrong, it's not your fault! With respect to financial analysts, it’s important to know who is paying the analyst and whether it is in his/her interest to be honest and impartial. Analysts often have close relationships with the companies they cover and issue (buy) ratings for. In my own experience, the research analysts are part of the marketing department of the bank/brokerage where I sometimes trade stocks. Obviously, these analysts have an incentive to write favorable reviews about the companies they cover so they can sell more stocks. This creates a potential conflict of interest. As for expert advice? As an active investor for the past 30+ years, I have come to the conclusion that much of the advice given by so-called experts we see on financial television, read in books, and magazines is mostly deceptive, ambiguous, or completely useless. Don’t depend on them! Even if you are working in a different field, become familiar with basic financial analysis and do your own due diligence. And yes, if you are wrong, you only have yourself to blame.

[Table of Contents](#_Table_of_contents)

# What do we know that we don’t know?

*Charles Pahud de Mortanges*

Known unknowns. Many ancient philosophers have pondered this issue: “To know what you know and what you do not know, that is true knowledge.” (Confucius). And according to that wise old Greek Socrates: “Wisdom begins when a person finds out that he does not know what he thinks he knows.” As individual investors we find ourselves in a bigger world, not really of our own making, and where we have little, or no control or influence. Yet, it is in that very same world in which we want to thrive, or at the very least, survive and protect what we have. In an attempt to understand the world around us we anticipate, in an intelligent and responsible way, situations that may happen, but we don’t know when, where, or how. The unknowns may become knowns, but not here and now. Or, it could be that the current unknowns are outside our circle of control, or influence (next season’s weather, or next year’s price of oil) But even there, we frequently run into problems: physical, psychological, or intellectual. Perhaps, one can take comfort in a comment from J.K. Galbraith: “The most common qualification of the economic forecaster is not in knowing, but in not knowing that he does not know. His greatest advantage is that all predictions, right or wrong, are soon forgotten”. The best you can do as an investor is to know what you own (know as much as possible about the business) and know why you are owning it. If you *do* fear the future, protect yourself - with inverse ETFs, for example.

*Jean-Marie Choffray*

The basis of reality (the truth?) is the center of convergence of its shadows... These sort of define its inverse, its opposite. The lies of men and their comedies are at the heart of reality. The same is true, no doubt, for the financial markets. Major events tend to repeat themselves twice: the first time as a tragedy, the second time as a farce, but always as a… play! What distinguishes men from animals is their ability to feign and, in particular, to feign to feign (cf. [S. Zizek](https://www.amazon.com/Welcome-Desert-Real-September-Related/dp/1859844219/ref%3Dsr_1_2?keywords=welcome+to+the+desert+of+the+real&qid=1580115557&s=books&sr=1-2)). The problem that naturally comes to mind, therefore, is the degree of confidence that one can place in a political leader, a business executive, a financial adviser, a short seller, a friend or enemy investor? How far can a man pretend and lie to protect his life, his family, his fortune or his professional reputation? No one knows, but is fully aware of it. For example, we all know that financials – income statements, balance sheets, cash flows – have little reliability and even less validity. They are as much a reflection of a company’s fundamentals – partially random – as of the personal and organizational covert strategies of its officers. In this regard, the recent press conference of a famous fugitive, and real master in the art of obscure remunerations, provides an excellent example! But, let us remain optimistic, in his weaknesses, “Man is capable of God.” ([B. Pascal](https://www.amazon.com/Pensees-Thoughts-Blaise-Pascal/dp/1420958313/ref%3Dsr_1_1?keywords=pascal+thoughts&qid=1580116881&sr=8-1))

[Table of Contents](#_Table_of_contents)

# Do chance and necessity explain the market?

*Jean-Marie Choffray*

As in men's lives, chance (random mutations) and necessity (natural selection) have an impact on business performance and growth. But, experience suggests that it’s most often marginal, thereby offering short-term opportunities for those companies that closely monitor their environment and for the investors who watch them carefully. As for the markets, while they are undoubtedly affected by random shocks and forced evolutions, they are much more influenced by the intentions and strategies of their many stakeholders. Their reflexive nature also makes it possible for the future to change the past (i.e. reverse past decision criteria!). What is most important remains invisible! Investors should devote time to identifying and studying the concealed strategies of “stealth” market participants. That’s where a careful study of the changes in volume of transactions (last month/daily data; last ten days/hourly data) is helpful. For example, the influence that short sellers exert on tentative acquisition strategies is probably underestimated. The same is true for the decisions made in the secrecy of private lounges by various public authorities and state wealth funds (ideologically motivated?). As [M. Friedman](https://www.amazon.com/Free-Choose-Statement-Milton-Friedman/dp/0156334607/ref%3Dsr_1_1?crid=3CAQ9PJAYR90A&keywords=friedman+free+to+choose&qid=1580068185&sprefix=friedman+%2Caps%2C235&sr=8-1) observed, it’s remarkable that those who are most indebted to the markets for their liberties are usually their most virulent adversaries!

*Charles Pahud de Mortanges*

I would interpret “Chance” as “Luck” and “Necessity” as acting out of “Fear Of Missing Out” (FOMO) and “Fear of Loss”. This, of course, applies to individual investor behavior, but investors in the aggregate make up market behavior as a whole. Investment decisions are subject to human emotions, and investors’ actions are usually motivated by fear and greed. A well-known *Fear & Greed Index* asks the question: “What Emotion Is Driving The Market Now?” And people (investors making up the market) frequently often behave like a crowd. That is, they tend to imitate the behavior of others. For example, investors pricing stocks not based on their own estimates of what their value is, but on what they think everyone else thinks their value is (a “Keynesian beauty contest”). Again, markets are usually not rational, as people fear missing out on a “hot” stock. And sometimes this works - until it doesn’t. Successful investing in the markets involves a large dose of chance, or luck, rather than skill. If investing were a game of skill, success would be more consistent and widespread. It isn’t. Proof? Many Hedge Fund “rock stars” performed terribly in 2016, 2017 and 2018.

[Table of Contents](#_Table_of_contents)

# What don’t we know that we know?

*Charles Pahud de Mortanges*

Unknowns knowns, or I don’t know but I know that others know. I do not know because of either inadequate communication, or the others decided to simply keep silent. To mitigate the effect of unknown knowns, develop certain hypotheses that you hope are correct assumptions (before making an investment decision). Also, there are assumptions that could have been identified as known knowns, but for some reason they were not. Numerous very hard lessons were learned about this when the dot.com bubble burst (2001). Speculative bubbles are often hard to recognize while they take place. But an intelligent investor making reasonable assumptions about sound business models and certain business valuation metrics (Price/Sales ratio; Price/Earnings ratio; Cash Flows) would have realized that these valuations in 1999 were ridiculous and unsustainable. For example: If the current stock price is $200 per share and earnings per share (EPS) is $1, the earnings multiplier would be (200 dollars /1 dollar per year) = 200 years. This means it would take 200 years to make back the stock price of $200, given the current EPS. Good luck with that! Even as we write this (2020) there are listed companies with Price/Earnings ratios of well over 1000! For example, *Live Nation Entertainment* (LYV) P/E = 1650.70. Another way of looking at it: Investors are willing to pay $1,650 for $1 of earnings. Don’t be a chump. Stay away! Make reasonable assumptions about future earnings and cash flows and see if they make sense.

*Jean-Marie Choffray*

Science doesn’t explain everything (cf. [J. Lennox](https://www.amazon.com/Science-Explain-Everything-John-Lennox/dp/1784984116/ref%3Dsr_1_2?keywords=john+lennox&qid=1580457389&sr=8-2)). In one of the best books written on investing, [Henry Clews](https://www.amazon.com/Fifty-Years-Street-Investment-Classics-ebook/dp/B000YIW60A/ref%3Dsr_1_3?keywords=henry+clews&qid=1580114248&sr=8-3) emphasizes the role of intuition on the most important decisions that he made as an investment banker. He also alludes to the impact of faith on the behavior of such legendary investors as D. Drew or C. Vanderbilt. Ethics and sense of responsibility (accountability?) are at the very heart of the behavior of many historic investors. Today’s reliance on algorithmic trading systems – model-based and/or heuristics-based – does not necessarily signify a break, insofar as no algorithm is spontaneous. It is always the expression of human creativity, experience and expertise. Gödel's incompleteness theorems, which state that no axiomatic system can be complete, are probably as valid in the world of finance and markets. G. Lilien’s reflection on [Model Relativism](https://www.researchgate.net/publication/38008664_Model_Relativism_A_Situational_Approach_to_Model_Building) is also more appropriate than ever. “The men who manage men manage the men who do things, while the men who manage money manage them all” ([W. & A. Durant](https://www.amazon.com/Lessons-History-Will-Durant/dp/143914995X/ref%3Dsr_1_1?keywords=the+lessons+of+history&qid=1580114510&sr=8-1)). “Money [… savings, capital] is the manure of the world on which our future stands” ([E. Zola](https://www.amazon.com/Money-Oxford-Worlds-Classics-%C3%89mile-ebook/dp/B00I8NR72K/ref%3Dsr_1_1?keywords=zola+money&qid=1580114550&sr=8-1)). Those who claim not to know these harsh truths are doomed to endure them. So, why is the fear of financial success driving so many high-value people - including yourself - to give it up?

[Table of Contents](#_Table_of_contents)

# Are financial markets rationally intelligible?

*Jean-Marie Choffray*

If the financial markets weren't rationally intelligible – understandable and predictable – you would be wasting your time reading this book. So, you believe they are rationally intelligible. I share your faith. In a stable environment – political, economic, technological – [technical analysis](https://www.investopedia.com/terms/t/technicalanalysis.asp) is useful insofar as it allows to grasp the invisible, the intentions and concealed objectives of competing investors. Behavioral indicators such as MACD, RSI, and DMI should be monitored carefully. Part of the truth may also be hidden in the changes in volume observable in two graphs: last month/daily data and last ten days/hourly data. In a non-parametric environment, characterized by discontinuities (e.g. quarterly results beats/misses, analysts upgrades/downgrades, technological innovations, geopolitical shocks) [fundamental analysis](https://www.investopedia.com/terms/f/fundamentalanalysis.asp) – the careful study of financial statements and sector dynamics – is definitely your best friend, even if some do consider that businesses have no intrinsic value. Nothing replaces the hard-earned experience and the [battle-tested heuristics](https://orbi.uliege.be/handle/2268/168479) painfully acquired in the fog of the markets, including the very first of them: under uncertainty, always protect assets (sell short?). So, there is no choice but to start learning and investing today, while working diligently. Everything else is wishful thinking and cannon fodder.

*Charles Pahud de Mortanges*

It has been estimated that since the Great Depression (1929-1933), there have been 28 booms and busts; some rather short, others more protracted (<https://www.nber.org/cycles.html>). Is there a clear and rational explanation for these events? Of course, but mostly with hindsight. When we have an opportunity to analyze historic data on GDP, inflation, interest rates, industrial production, retail sales, employment, and personal income among others. Investors should keep a close watch on several Leading Economic Indicators (like interest rates and consumer expectations) for signals as to where the economy and the markets may be heading. In fact, the market itself (the S&P 500) is considered a leading indicator. A simple MACD and RSI analysis of the S&P 500 may be very informative, as is the level of market volatility measured by the VIX. One should study these statistics and indicators in a calm and dispassionate way. On average, booms last 39 months, busts 18 months. Investors have no other choice but to accept this and adapt their strategy accordingly to protect their assets.

[Table of Contents](#_Table_of_contents)

# What are ETFs (inverse, leveraged) good for?

*Charles Pahud de Mortanges*

An Exchange-Traded Fund (ETF) is a basket of securities you can buy, or sell directly and on a daily basis, on a stock exchange. Beware, ETFs are not the same as Mutual Funds; the latter are managed differently. Because ETFs trade like stocks, ETF shares can be bought and sold at any time. Limit- and stop-loss orders can be used to reduce risk. Short selling is also possible. ETFs are big business: In 2018, there were 6478 ETFs listed globally with total assets of about $ 4.69 trillion U.S. dollars.( <https://www.statista.com/statistics/278249/global-number-of-etfs/>) There are several types of ETFs: Market ETFs; Sector & Industry ETFs; Commodity ETFs; and Foreign Market ETFs, among others. Inverse ETFs are designed to profit from a decline in the underlying market or index. A leveraged ETF uses financial derivatives and debt (leverage) to amplify the returns of an underlying index. A typical leveraged ETF aims for a 2:1 or 3:1 ratio. As with all leveraged investments it can lead to amplified gains but can also amplify losses. The main benefit of investing in ETFs is diversification (you buy a “basket”). Also, if you wish to build a portfolio with a specific asset allocation (say 60% stocks, 40% bonds), it is often easier with ETFs than with individual stocks and bonds. One can use an ETF “screener” to search for ETFs that fit your own criteria (<https://etfdb.com/screener/>), or <https://etfeurope.net/>

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ETFs (Exchange Traded Funds) are “synthetic” financial products allowing investors – individual and institutional – to generate a performance equivalent to that of an underlying index (S&P 500, Dow Jones 30, Nasdaq 100, etc.) in a single transaction. They cover a vast range of asset classes, industries, issuers, and investment styles: stocks, bonds, currencies, commodities, derivatives (volatility), etc. Their goal is to provide investors with an “intelligent” diversification instrument while boosting market liquidity. They offer direct or inverse access to the performance of the underlying assets, and can be enhanced through structural leverage (Leveraged ETFs). The [ETF Database](https://etfdb.com/etfs/) provides an exhaustive coverage of this universe. In their direct and inverse forms, they are real investment products that can be used by all as a cheaper alternative to actively managed funds. In their leveraged form, their use should be limited to short-term portfolio hedging. The [greatest vigilance](https://www.proshares.com/media/documents/geared_investing.pdf?param=1580048759401) is required when using Leveraged ETFs for long term investing, as losses tend to cumulate exponentially. Passive ETFs represent today a significant portion of the total [transaction volume](https://www.xtf.com/ETF-Market-Summary). Recently, some have raised concerns about their potential negative impact on market liquidity in case of brutal trend reversals.

[Table of Contents](#_Table_of_contents)

# How do growth prospects affect valuation?

*Jean-Marie Choffray*

Like any living organism, businesses grow and multiply or disappear. They can be conceptualized as growth generating processes (of their assets), subject to economic value creation (protection of their shareholders’ equity). Analytically, Return On Investment (ROI) is a function of the net present value of the flow of earnings it generates. Assuming a constant rate, ROI=(E/P)+G, where E=EPS (Earnings Per Share); P=Price Per Share; G=EPS Growth Rate; PER=P/E (Price Earnings Ratio). All other things being equal, investment performance is inversely related to PER and directly related to EPS Growth. So, a deceleration – real or expected – in earnings growth will usually lead to a drop in PER, i.e. market capitalization. Of course, earnings growth is not only related to operational growth. The way management monitors the cost structure is most important. Businesses should only concentrate on revenue growth (sales, market share?) as long as it converts into earnings growth. Non profitable growth should be banned, even if many consider such a statement politically incorrect. As financing is marketing, the ultimate valuation of a business is not only a function of its financials, but also of the credibility of the growth story (real or anticipated) that its managers are able to sell to the market (think Tesla?).

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The objective of any business, and the responsibility of management, is to maximize its value. How to assess the value of growth? To get an estimate of the value of a (large) public company, I prefer the Discounted Cash Flow (DCF) method. It is an “intrinsic value” approach, where I try to a make a reasonable forecast of the business’ unlevered free cash flow into the future ( e.g. 5 years) and discount it back to today with the company’s Weighted Average Cost of Capital (WACC) as the discount factor. But remember, not all growth has value; it can have zero value or can actually destroy value. There is trade-off: growth is good; it increases your earnings in the future, but to grow you have reserve money right now to pay for more employees, a larger workspace, additional inventory, etc. So, you have to give up cash flows today to keep growing tomorrow. If you have to give up more cash than you get back, you destroy value. Investing in businesses with positive revenue growth, but negative earnings and negative cash flows is *speculation* (as in TSLA today!). Harvard Business Review published an excellent article (2005) on the “Relative Value of Growth”, which can be found here: <https://hbr.org/2005/04/the-relative-value-of-growth>

[Table of Contents](#_Table_of_contents)

# Is it reasonable to want to beat the market?

*Charles Pahud de Mortanges*

It is perfectly reasonable to wish to measure your performance against a certain benchmark - and hope to do better. In the U.S. a common benchmark is the S&P 500 (the 500 largest American public companies). Every week, an online (web) service (*Simply Wall Street*) I use, informs me whether my portfolio did better, or worse than the market. I find this annoying, because I don’t care. Why? Because it is very difficult to consistently beat the market. There are times (2019) when everything “works” and there are years (2018) when nothing works. There is always reversion to the mean. Professional fund managers have the skills, in-depth research and other resources at their disposal that ordinary investors do not. Yet, numerous studies have shown that fund managers consistently underperform the indices (like the S&P 500). If you want to at least “keep up” with the market, buy the S&P 500 index ETF (SPY). Personally, I am more interested in what is likely to happen, in terms of opportunities and threats. And how I can profit from both. The world of finance is driven by extreme events; a small number of events cause the majority of outcomes. (Pareto was right!). So, it is with investing, where a small number of stocks have a major impact on the value of your portfolio.

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In the long run, a diversified S&P 500 investment, without financial leverage, generates an average [annual performance](https://www.berkshirehathaway.com/letters/2018ltr.pdf) of around 10%. A question then comes to mind: is it possible to do better? To my knowledge, there are only two ways to “beat” the market: (1) invest for the long run in a diversified portfolio (limit risk exposure to common risk) with a financial or structural leverage – i.e. assets to equity ratio > 1.0 or [leveraged ETF](https://etfdb.com/etfs/leveraged/) – and bet on the fact that, in case of a market downturn, you will sell in time or Central Banks will demonstrate their legendary generosity (“Heads I win, Tails you lose”); (2) invest for the short run in high quality individual assets and businesses facing temporary difficulties (expand risk exposure to common and specific risk). The goal is to invest proactively in opportunities that could benefit from possible market corrections. In this case, investors should avoid concentrating on too few (less than seven) securities and keep a significant portion (+/- 50%) of their Assets Under Management (AUM) in cash or pseudo-cash (treasury bills?). Surprisingly, very few professional investors do appear to beat the market. This inevitably suggests a potential lack of skills and/or a reluctance to deliver the hard work and diligence that’s needed to do better than headless crowds…

[Table of Contents](#_Table_of_contents)

# Concluding remarks

The future only exists because we believe in it, we want it, we create it. This short book was born from the idea that the era of uncertainty into which our world has entered, following the American conservative revolution, the opening of China, and the renunciation of Europe to its dreams, offered an exceptional opportunity to discuss the role that financial markets might have to play. Markets give those who have the intelligence and the courage to accept their limits and weaknesses three additional degrees of freedom: (1) to share the vision and the success of others, (2) to build financial independence responsibly; and (3) to contribute to a peaceful future, by renouncing violence and the sacrifice of innocent people in response to the conflicts with which humanity is regularly confronted (cf. [R. Girard](https://www.amazon.com/Things-Hidden-Since-Foundation-World/dp/0804722153/ref%3Dsr_1_1?crid=1YNJVGHSY33N&keywords=things+hidden+since+the+foundation+of+the+world+by+ren%C3%A9+girard&qid=1580209130&sprefix=ren%C3%A9+girard+things+hidden%2Caps%2C243&sr=8-1)).

Once identified, this opportunity remained to be exploited while respecting our personal experience and convictions. We decided to express ourselves completely independently, in restricted and equivalent half-pages, on some of the most important questions related to the market’s unique system for producing and sharing wealth. Being sure of holding only part of the truth, we had enough sincerity and respect not to seek to influence each other. It is, therefore, up to you to make the best of things and extract from our observations the information most useful to your discovery of this exceptional technology.

In the fog of present times, the truth is that human history is not coming to an end anytime soon. The progress of knowledge and science suggests rather that it has barely begun. Its most salient pages remain to be written. Chance (random mutations) and necessity (natural selection) constitute a necessary, but not a sufficient, condition for life and economic progress. It is up to us to use our intellect and our sense of responsibility, through our free investments, to mitigate their deleterious effects (cf. [I. Prigogine](https://www.amazon.com/End-Certainty-Ilya-Prigogine/dp/0684837056/ref%3Dsr_1_1?keywords=prigogine+the+end+of+certainty&qid=1580210219&sr=8-1)). But, do men really want what they declare to desire? Our **Short answers** are testimony to what we have observed and to our many failures and few successes. *Veni, vidi, vici*. As a man learns to walk while falling, it’s natural that he learns to invest by losing! Our purpose here is to help you limit your losses while guiding you in your discovery of what financial markets might hold for you.

[Table of Contents](#_Table_of_contents)

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[Table of Contents](#_Table_of_contents)