THE PSYCHOLOGY OF FINANCE: ONE DECADE, TWO NOBEL'S

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ABSTRACT

The study of behavioral finance combines the investigation and expertise from research and practice into smart portfolios of individual investors' portfolios that can overcome cognitive errors and misleading emotions and drive investors to their long term goals of financial prosperity and capital preservation. If 10 years ago, Behavioral Finance was still considered and incipient science, the first Noble Prize in Economics awarded to the study of Behavioral Economics establish the field as a new, respected study of economics. 2013 Nobel Prize was awarded to three economists, one of them considered the one of the founders of the Behavioral Finance. As such, by now we are entering the coming of age of behavioral finance. It is now establish as a science of understanding investors behaviors and distill these patterns with quantitative finance to provide practical models grounded on robust understanding of investors as well as investments.

The practical application of BiFi can help us discover how individual and group herd behaviors can lead to biased investment decisions, understand the resorts behind their decision making processes and develop practical tools to improve portfolio and risk management processes, so in the end to be better serve the client-owner of the funds managed an finally to help for the better good of society at large

KEY-WORDS: Psychology, biases, efficiency, individual investment

Classification :
REL 5F, 5G, 5K, 7J, 7K,7L, 10B,10F
JEL: G11, G12, G14

Nobel's inter-disciplinary connections and opposing views

In 2013, Eugene F. Fama, Lars Peter Hansen and Robert J. Shiller were awarded the Nobel Memorial Prize in Economic Science. Robert Shiller won the prices with his theme that real estate bubble was a reality, Eugene Fama with his theme of rationality and efficiency of all markets. Fama is one of the fathers of rational, efficient markets, and the advent of passive, index investing. If markets are so good and efficient, than of a net of costs basis markets are efficient and passive investment is as good as active. Peter Hansen, is the pure mathematician of all three. He has developed a method to statistically evaluate price movements of financial assets- now a basic tool in all social sciences.

There is, however, a common, absolutely wonderful red thin line that can be wavered from their Nobel award winning theory: financial markets are most probably unpredictable and apparent irrational (Fama; " *I do not understand the word bubble…")* for the short term; for the long term, however, a certain degree of predictability can help the academia and the practicians understand the reasons, the whys and how's the prices of financial assets align to a long term, more predictable evolution of under and over performance – probably a normal(ized) performance.

All three look to agree on one term: markets react, move, trend and have evolution based on a cocktail of rationality and fundamentals and non-rationality and behavioral emotions. The scientific accolade recognizes financial, economic, statistical, psychological and social work that has been innovative within the academic tower but very relevant outside it: Mr. Fama's[1] conclusions about market efficiency have encouraged the emergence of so-called index funds in financial markets. Mr. Shiller has applied his work by creating the monthly Case-Shiller index (with economist Karl Case), which many asset managers now find to be an indispensable tool to measure house prices and professor Hansen's statistical models[2] have been used in all sorts of scientific research and applications. Kahneman and

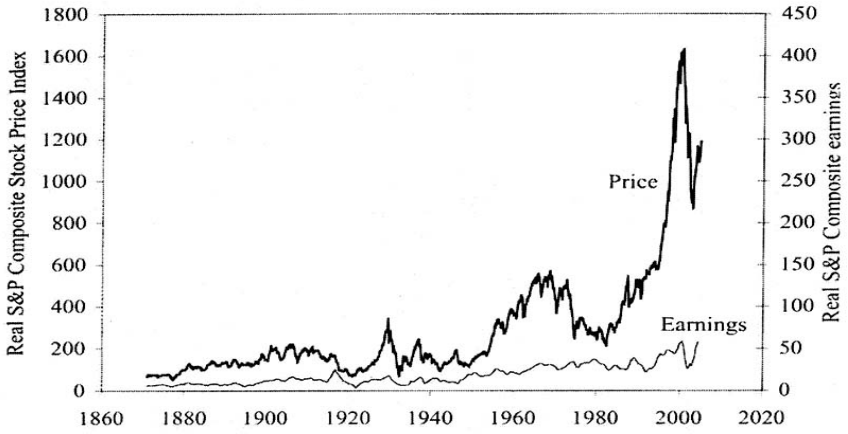
[1] The Fama-French Three Factor Model is a method used by finance professionals to explain the risk and return of equity portfolios. The Three Factor Model compares a portfolio to three distinct risks found in the equity market to assist in decomposing returns. Before the Three Factor Model, there was the Capital Asset Pricing Model (CAPM), a single factor way to explain portfolio returns.

[2] **Lars Hansen** - David Rockefeller Distinguished Service Professor, University of Chicago
Hansen is recognized for making fundamental advances in our understanding of how economic agents cope with changing and risky environments. He has contributed to the development of statistical methods designed to explore the interconnections between macroeconomic indicators and assets in financial markets. These methods are widely used in empirical research in financial economics.

Tversy, the precursors of Behavioral Finance (and Daniel Kahneman won) introduced first the idea long ago (1984) that bad is tangible stronger than the good. They had experiment participants perform an simulation in which they either gain or lost the same amount of capital. The players that lost reported a higher quantity of emotional distress over losing some money; this was significantly greater that the monetary satisfaction related to winning and exact amount of money, opposite of their losing bet. Consecutive effect, snowballing, of bad outcomes were not present on good (consecutive) situations.

The 2013 Nobel has forced us further in the inter-disciplinary path where fundamentalists, statisticians, psychologists, physicists must work hand in hand to find new universal laws which can select. Somehow my inter-disciplinary mind registered Eugene faster than Fama. After all, Eugene Stanley, the father of econo-physics, could also get a Nobel. If psychologists could get the biggest award for economics, a physicist could have been there, too. But then the surprise became bigger, not because it was Fama not Stanley, but because Robert Shiller[3] shared the award. When behavioral finance got the Nobel for economics in 2005, the Economist magazine carried an article pointing out how a new theory had junked 200-year old classical economics.

It was not just media, but even psychologists who were bent on burying classical economics. Efficient market hypothesis was presumed dead. It was considered deficient. but over the years, defending the underdog changed to understanding the new theories and then finally even questioning them (Shiller's exuberance, end of behavioral finance). It's a fight between perception and reality at a certain point of time, which of course is dynamic, leading to new perceptions and new realities at new points in time. Now that Fama has been acknowledged yet again, his tough stand against behavioral finance as stories of anomalies can be seen in milder light. After all, standing there with Shiller would definitely make him believe "*even together we don't know all the truth*". The blind men and the elephant metaphor remains a strong theme. 'My elephant is efficient while yours is inefficient' has been overruled by the Nobel committee which believes that the elephant is both efficient and inefficient sometimes.



Source: Robert Shiller's plot of the S&P Composite Real Price Index, Earnings, Dividends, and Interest Rates, from Irrational Exuberance, 2d ed.(2005)

On one side Shiller's exuberance is quite clear from the illustration above, how fundamental earnings diverge from real prices. But on the other side a two scale look (illustration below) shows some similarity in growth and decay seasonality among the two values. The seasonality aspect is not discussed in Shiller's work. The failure of behavioral finance to take it from the fundamentalists can be viewed as a victory of sorts, but it's still an illusion. The Nobel Prize bashers like Taleb[4] also won't enjoy this as their randomness theories get weaker by the day. The committee needed Lars Peter Hansen[5] to balance.

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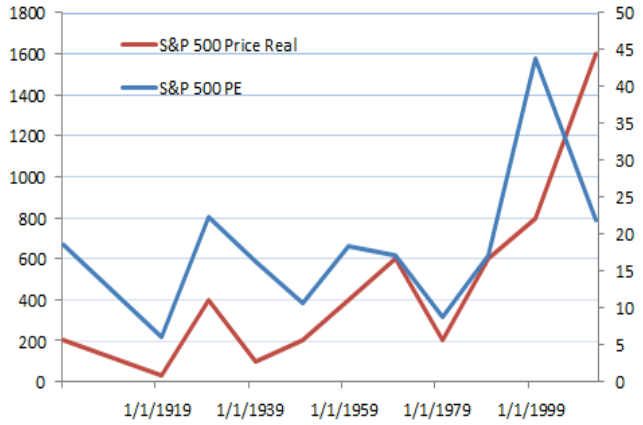
[3] **Robert J. Shiller** is Sterling Professor of Economics, Department of Economics and Cowles Foundation for Research in Economics, Yale University, and Professor of Finance and Fellow at the International Center for Finance, Yale School of Management. He received his B.A. from the University of Michigan in 1967 and his Ph.D. in economics from the Massachusetts Institute of Technology in 1972. He has written on financial markets, financial innovation, behavioral economics, macroeconomics, real estate, statistical methods, and on public attitudes, opinions, and moral judgments regarding markets.

[4] Nassim Taleb, author of *Fooled by Randomness*, *The Black Swan, The Bed of Procrustes,* and *Antifragile*

[5] Hansen's recent work focuses on uncertainty and its relationship to long run risks in the macro economy. He explores how models that incorporate ambiguities, beliefs, and skepticism of consumers and investors can explain economic and financial data and reveal the long-term consequences of policy options. Hansen and coauthors have recently developed methods for modeling economic decision-making in environments in which uncertainty is hard to quantify. They

Source: Plot of S&P Composite Real Price-Earnings Ratio and Interest Rates using data from irrationalexuberance.com/shiller_downloads/ie_data.xl

Date	S&P 500 PE	S&P 500 Price Real
1/1/2013	21.9	1600
1/1/2000	43.77	800
1/1/1990	17.05	600
1/1/1980	8.85	200
1/1/1970	17.09	600
1/1/1960	18.34	400
1/1/1950	10.75	200
1/1/1940	16.37	100
1/1/1930	22.3	400
1/1/1920	5.99	30
1/1/1900	18.63	200



What did Hansen do? Hansen says that both efficient and inefficient schools could be understood better with more testing as the economic system is not static, it's a dynamic system with multiple moments. Is this not a step ahead toward assuming markets as natural systems? Are the laureates not struggling to understand divergence: why are markets not predictable in the short term and why are they predictable in the long term?

The Social Mood reflection into Individual Mood and Predisposition

A market going up and down with the length of skirts was a strange idea of an economic indicator. Ralph Rotnem was a Harvard graduate and he created the indicator after seeing an uncanny pattern, which kept reappearing. Because skirt lengths have limits (the floor and upper high respectively), the reaching of the limit implies the concurrence of an extreme positive or negative mood. The social mood was linked with stock market expression.

We express social moods in many ways. When we are happy, then along with skirts or business suits, we also buy cars, listen to vibrant music and see a lot of films. A social behavior expert could have predicted the big bull market in India after seeing just a couple of Bollywood films. A majority of Indian films had themes of love, dancing around trees and were overall a celebration of life. This was an expression of socially positive mood and consequently a positive time for stock markets. HBO's Sex and the City got a celebrity status during such times. After all, Carrie Bradshaw, despite all her knowledge about good sex was looking for love and finally did settle down with Mr. Big, a similar theme over occident and Asian cultures in similar time periods.

Human emotions are rhythmical and have wave nature. And these waves are hypothesized to govern all human activities including business, politics and pleasure. When mood trends up, people buy stocks, just like they buy clothes, film tickets, jewelry and clothes. And when the social mood trends down, the broad consumption pattern flags and people don't buy stocks, they sell. Robert Prechter has illustrated this concept of social behavior in his two seminal books on '*Socionomics*'[6]. He talks about polarity of behavior. And how humans oscillate between positive and negative moods i.e. between concord and discord, inclusion and exclusion, forbearance and anger, confidence and fear, embrace and avoidance of effort, practical and magical thinking, constructiveness and destructiveness, desiring power over nature and over people, all of which has a consequent effect on markets trending up or down.

Just like the hemline indicator, there is also a skyscraper effect. The higher up we go the sky, the more prosperous we are. And the more prosperous we are, the more near a top we reach. A study of the tallest buildings of the world has historically given accurate signals of intermediate and primary degree tops. For example the World Trade

explore the consequences for models with financial markets and characterize environments in which the beliefs of economic actors are fragile.

[6] Bob Prechter is president of Elliott Wave International, which publishes analysis of global stock, bond, currency, metals and energy markets. He is director of the Socionomic Institute, an independent think-tank, which researches Prechter's theory of social causality: socionomics. Bob Prechter has also been named "one of the premier timers in stock market history" by *Timer Digest*, "the champion market forecaster" by *Fortune* magazine, "the world leader in Elliott Wave interpretation" by The Securities Institute, and "the nation's foremost proponent of the Elliott Wave method of forecasting" by *The New York Times*.

Authored, co-authored and/or edited 13 books, including *Elliott Wave Principle – Key to Market Behavior* (1978), *R.N. Elliott's Masterworks* (1980), *The Wave Principle of Human Social Behavior and the New Science of Socionomics* (1999), *Conquer the Crash* (2002), and *Pioneering Studies in Socionomics* (2003).

Centre of 1973 marked the Dow 1000 top. You can look at the Burj Dubai skyscraper timing. The first press release on their site is dated March 2005. The Dubai stock Index peaked months after in November 2005. The Index is down 62 % from the top. Some might call it strange coincidence, but this happens again and again, a historical characteristic associated with skyscrapers. "Let's make the tallest building", is associated with prosperity high. And after prosperity high comes a fall.

Men desire change, or at least bring it about, even when it appears superficially. For example adversity eventually breeds a desire to take charge and responsibility, achieve and succeed, while prosperity eventually breeds irresponsibility, complacency and sloth. Events are perceived as turning points for mankind. This is conventional, cause and effect relationship. The very reason it does not work. Turning points are generally the opposite as each positive point is a step towards negativity. And each negative point is a step towards positivity. Men produce more goods and services when the dominant social mood is positive. The reason for the lag between the mood (tracked by stock market) and the result is that people take time to put their new found energy to work. And then reap the fruits of its employment. Plot depressions, recession and economic booms and you see the correlation work. Prechter has even gone ahead and plotted music as a social expression. How the music we like expressed the social mood of the society.

A recent work also connects our preferences for cars. As we go up in stock markets our color preferences are black, white and red and angular straight cars, remember the white Ambassador? And as our preferences change to transition colors like grey and silver moving to brown and green and rounded cars, we as a society are becoming more negative.

We can afford to be sharp when we go up, but as we go down, smoothing the edges becomes imperative, be it cars or clothes or shoes, rounding just gets in. It has also to do with our ability to visualize. We cannot see inversions like inverted yield curves or an inverted picture. There are a host of trend studies about when we like ghost movies and when we appreciate animation. Why having the hamburger cheapest in Tokyo is not a coincidence? Why making more babies is a positive social mood? And being single or an ageing society comes after a society undergoes negativity in social mood?

As the future is going to be socially negative and these are times we as a society don't enjoy celebration of love but big screen sex and sirens. Markets lead events and events are caused by the social mood. And social mood has a mathematical Fibonacci relationship linked with it. Ask an open ended question to a group of 100 people, the answer will most likely be a 62/38 polarity[7]. And if this still does not hit you, remember your next boss might just be a woman. Women do better in a socially falling transition. And if she drives a green 'Swift' and wears a skirt, the broker might just have his trade signal.

New era of behavioral Finance?

We really don't know why Richard Thaler chose this headline for a research paper. Many other behavioral finance academic papers also capture attention. "Can the markets add and subtract?"; "The winner's curse"; "The gambler's fallacy", "Does the stock market overreact?" While the popularity of the subject has increased and behavioral biases have got so pervasive that everybody seems to be biased, the question is whether the behavioral finance experts are bias free? Behavioral finance is a subject built around price anomalies. Anomaly is a deviation or departure from the normal. Prices tend to deviate from normal most of the time. Markets tend to overvalue or undervalue asset prices more often than staying at fair value. So, whether it is stock markets diverging from the real economy or a performing sector diverging from an underperforming one, it all boils down to divergence. This idea of deviation, departure or divergence can be extended from the markets to nature. A low paying job versus a high paying job, lot of rain compared to drought, magnetic anomalies, divergences are all over the place.

It's not the task of behavioral finance experts to look for transcending rules across areas of study, be it psychology or nature. Many time thinkers are so focused on "pattern seeking" that the big picture eludes them. And whose job is it anyway, to look for common rules across nature? Even Mandelbrot, who could have pushed himself for connecting diverse areas, concluded that it was all geometry, there was no law. The statisticians are the ones who look at deviations, departures as errors and they are the ones who identified that fat tails were more normal than irregular. So, if diversions are a reality across nature, then is behavioral finance not getting ahead of itself by basing every stock market departure as owing to psychology and ignoring the rest of the natural divergences?

[7] Fibonacci Retracements are ratios used to identify potential reversal levels. These ratios are found in the Fibonacci sequence. The most popular Fibonacci Retracements are 61.8% and 38.2%. Note that 38.2% is often rounded to 38% and 61.8 is rounded to 62%. After an advance, chartists analysts apply Fibonacci ratios to define retracement levels and forecast the extent of a correction or pullback. Fibonacci Retracements can also be applied after a decline to forecast the length of a counter trend bounce. These retracements can be combined with other indicators and price patterns to create an overall strategy.

The five aspects Thaler[8] points out in his paper '*End of behavioral finance'* (a term he confidently used to suggest that behavioral finance will be the only form of finance left) are 1) The equity premium puzzle, 2) Predictability, 3) Dividends, 4) Volatility and 5) Volume myth. All of these five aspects can be explained as mean reversion failures. First; the equity premium puzzle is that the undue premium equities get over treasuries are more than justified by the inherent risk in equities. So, the question behavioral finance is asking here is why equity premium (above the risk premium) does not revert to the mean (vanish), or why don't equities erase the respective premium vs. treasuries over a certain period.

An alternative model of research is already thriving in the US, and it's only a matter of time that it is accepted globally. The new capital market research model should be different from the old one and clarify some broad misconceptions of traditional research such as capital market research is free; it is linked with money management revenue; it is incapable of earning big bucks on its own; it needs domain knowledge i.e. to know about coffee plantations all over the world to forecast coffee prices; it means access to privileged information; it is extrapolation; it is resource intensive; it is not accurate and accountable; it cannot be global and local at the same time and it can never be a standalone business. Non-traditional research[9] addresses all these misconceptions and a research revolution is already under way. What we need is a few more coincidences, a few more questions and an elephant to blow the blinds away.

Investment Finance is Behavioral Finance

Behavioral finance assumes that, in some circumstances, the markets can be informational inefficient mostly because of the influence of the quasi-distorting, the non-rational influence of the psychological biases of investors.

These prime factors bias financial decisions systematically and unproductively from the rational rules of investment behavior. The imbalance between demand and offer can be attributed to non-rationality but also depend on circumstantial, temporal effects.

The stock market operates sometimes wide apart from the simple bid and ask mechanism; when demand for a certain stock increases with no apparent economic justification except for a market psychological momentum, the offer can decrease as result of stockholders intention to profit in the future from the unexpected surge in the interest for the respective stock.

[8] The End of Behavioral Finance, Research Foundation Publications, December 2010 | Vol. 2010 | No. 2 | 10 pages, Source: CFA Institute, Richard H. Thaler: „*I predict that in the not-too-distant future, the term behavioral finance will be corrrectly viewed as a redundante phrase. What other kind of finance is there? In their enlightment, economists will routinely incorporate as much „behavior" into their models as they observe into the real word. After all, to do otherwise, would be irrational*."

[9] Behavioral finance explains that financial phenomena can plausibly be understood and somehow predicted using models in which some operators and agents are not fully rational. The field has two building blocks: **limits to arbitrage** (difficult for rational traders to repair the dislocations caused by less rational traders); and **applied psychology** (which catalogues the kinds of deviations from full rationality).

Contrasting Models of Finance

Efficient Market Hypothesis (EMH)	Socionomic Theory of Finance (STF)
1. Objective, conscious, rational decisions to maximize utility determine financial values.	1. Subjective, unconscious, prerational impulses to herd determine financial values.
2. Financial markets tend toward equilibrium and revert to the mean.	2. Financial markets are dynamic and do not revert to anything.
3. Investors in financial markets typically use information to reason.	3. Investors in financial markets typically use information to rationalize mood-induced imperatives.
4. Investor decisions are based on knowledge and certainty.	4. Investors' decisions are fraught with ignorance and uncertainty.
5. Exogenous variables determine most financial decisions.	5. Endogenous social processes determine most financial decisions.
6. Financial prices derive from individual decisions about value.	6. Financial prices derive from trends in social mood.
7. Financial prices are random.	7. Financial prices adhere to an organizing principle at the aggregate level.
8. Financial prices are unpredictable.	8. Financial prices are probabilistically predictable.
9. Changing events presage changes in the values of associated financial instruments.	9. Changing values of financial instruments presage changes in associated events.
10. Economic principles govern finance.	10. Socionomic principles govern finance.

This positive reinforcement cycle of increased demand and decreased offer is not necessarily correlated with new, unexpected positive economic data about the company. One of the most important decision input is not related to rational optimization of cost/benefit ratio but to achievement and maintenance of a psychological state of consonance of the respective decision with investor's risk profiling and its practical situation. Investor perception is shaped by her autobiographic memory, an apparatus that records events in a highly organized and selective manner, based on their significance and emotional relevance for the person. The outcome of the events is perceived in the light of life experience and its possible financial and social repercussions.

Information processing is performed at the semantic level (personal knowledge accumulated during lifetime) and then at the emotional level (autobiographic memory and personal experiences during lifetime). In the age of global central banks coordination and a silent competitive fight, volatility has become cheap, but assets became expensive. Since growth cannot be solved by monetary policy alone, it does not address skills mismatches, ageing populations, labor market red tape and protectionist policies.

Central banks can ease some of the pain – but ultimately policymakers must deliver structural reforms to boost growth European Central Bank pledged to do all it could to save the euro - using the LTRO as a monetary policy rather than a crisis-fighting tool was misguided. A stronger euro is unwelcome because it can hurt exports, and higher money-market rates both effectively tighten financial conditions. But any attempt by the ECB to curb a rise in money-market rates and the euro will be complicated and overshadowed by U.S. monetary policy since the Fed is saying interest rates would stay low for a prolonged period.

The Psychology of Finance

Analyzing the data for this study leads to the academically interesting conclusion that individual psychological biases and differences should not be confounded with noise within econometric models but rather manifest a solid influential role on the dependent variable – investment outcome. Data base source for the article shows that psychological characteristics have salient relationships with various aspects of investment decision making process making and the transactional activity of the individual investor.

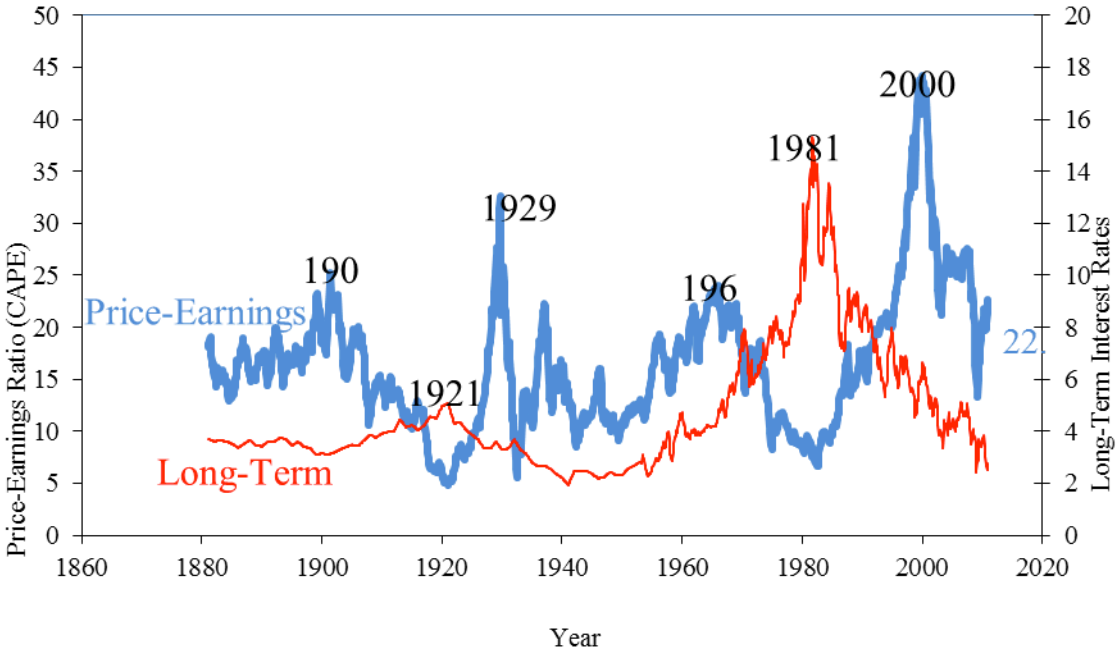
The findings suggest that psychological biases can have an impact on risk return optimization, asset allocation on investment portfolios and finally on investment outcome. The sources of investor biases that lead to investor finance errors the investment management industry can apply the data for the development of products and services (automated pilot investing) that may help save investors from sabotaging their financial standing and future prospects.

Also, new behavioral portfolio construction methods should combine evidently classic finance math with rigorously quantified psychological metrics to improve models for operators use in giving financial advice and crate investor portfolios that enhance investors chances for reaching their life time financial goals.

Nature has no straight line, but if the stocks are going up today, they will go up tomorrow. If stocks are falling today, they will fall tomorrow are biases we don't challenge. It can also be called as the order bias. If there is order, things are correct and when there is chaos, it's the global economy, the interest rates, the food, oil, currency or politics.

A majority of us suffer from a permanent bull bias. There are a few who thrive in falling markets, but there are few of them with permanent negative bias.

Figure 1: Robert Shiller's' Paper on 'The Volatility of Stock markets Prices'



The model of Bachelier was introduced to the new world of finance later in 1964 by Paul Cootner: "The Random Character of Stock Market Prices" [10]. Robert Shiller's' Paper on 'The Volatility of Stock markets Prices' published in 1987 uses dividend data and real interest rates to seek evidence that true investment value changes through time sufficiently to justify the price changes. His paper concluded that most of the volatility of the stock market prices appears unexplained. Shiller volatility or fluctuations prove that behavior of markets is not normal. Non normal distribution series is a widely followed proof of inefficiency in prices.

The investors interpret market data and events at two cognitive levels: the intellectual level of ordination, process and analysis of real factors (economic data), and the logical and rational level of understanding what this objective identifiable factors will influence the perception of the other players on the market. The information has investment value when is correlated with professional knowledge (human intellect) and interpersonal dynamics of market players (their emotions and sentiments). Due to uncertainty and continuous change in the game of the market, there is a strong interdependence between personal experiences (autobiographic memory) and rational expectations of the investors about the future, since their personal experiences influence the way they interpret and select available data.

Practically, behavioral finance complements but not replaces technical and fundamental analysis by the systematic analysis of the fundamentals of the market prices as a result of the correlation between investor experience and expectations and the market momentum. Slow changes in the market sentiment are not emotionally contagious, but they insinuate slowly in a market trend. Sudden moves, on the other side, are attributed to new strong evidence presented and disseminated by the market; these do not have a lasting effect, once the new resistance or support floor was established. In general, investors tend to accept with relative ease the market momentum that is imposed by the majority rather than adopt a contrarian investment strategy, since dissatisfaction of a negative result, after a contrarian decision, weights significantly higher than the eventual satisfaction coming from a contrarian decision.

The Intuition System and its influence on the investor cognitive decisions

This regression is statistically significant, so we can conclude that a significant nonlinear dependence exists between daily returns on that specific index, BET. We can confidently assume that index pattern evolution does not follow a random walk. The local market research introduced also by the paper tests the random walk hypothesis to see if markets move at random and investors do not express any behavioral biases. We can infer that there is linear dependence between daily returns, and the index series of BET does not follow a random walk pattern. Other factors

[10] Sales, Mark; David McLaughlin, David (April 1997); „*Fractals in Financial Markets*"; Vandelbilt University http://ftp.ec.vanderbilt.edu/Chaos/FMH/main.html

could influence this evolution, and they are persistent and consistent. Research in behavioral finance has important practical and academic applications.

The research can help guide investment portfolio allocation decisions, both by helping the understanding the kinds of errors that investors tend to make in managing their portfolios, and also by allowing us to understand better how to allocate assets and locate profit opportunities for investment managers. Understanding the psychological foundation of human behavior in financial markets facilitates the formulation of investment policy statements for individual investors. Methods that originate in psychology are used as research tools, along with traditional finance research methods.

Over these years, the academic and practioners world of finance have seen the blossoming of behavioral finance into a significant body of knowledge. The combination of theoretical and empirical work[11] has allowed us to see the relevance of the basic psychological theories to many financial phenomena. The newly developed body of knowledge is an important addition to the theory and practice of modern finance.

If tests of market efficiency reveal a strong form of efficiency, then a professional portfolio manager could not obtain abnormal returns only if she used insider information. A lack of liquidity and depth of the market can be profitable for some investors that are capable to use this apparent inefficiency and departure from random walk, for the increased investment performance. From academics and economists perspective, financial world is populated by rational investors, but from practical perspective, behavioral investors manage the world.

We have not yet get ashore from the current financial crisis caused by our blind and unchecked trust that house prices can only go up and the real estate system is available to ride for everybody based on a well-functioning oiled machine of the commercial banking mortgage system based on credit expansion. The banking system proved to be the culprit that lifted and kept flying the real estate prices to new heights and all this was a clear indication of human nature basis need to quick strike to luck and fortune.

Behavioral Economists that have won two Nobel Prizes in the course of last years convinced us that our basis nature biased to fear and greed – the competitive, survival focused animal spirit is The cause of our financial fortunes and delinquencies. The latest technologies of functional magnetic resonance imagining and of DNA and other sophisticated genetic tests can help us understand how and most importantly why we behave the way we do in our relation with stress and our finances. Researchers found that more than 3 billion years of evolution have shaped our behavior and habits.

Evolutionary data and our genetic imprint conduct our behaviors in life and in managing our relation with our money. The way we behave in financial markets resembles the way we behave in life, as they result from our portfolio of neurotransmitters, neural processes and biochemical messengers, many social and emotional processes, physiological and psychological correlations, genetic and geographical location predispositions, our creed and non-school education and even the current status of our personal relations, a favorite sound of the day, the color of our environment or our perceived professional posture - all have a direct implication on how we manage investments and construct our financial standing for the future.

Financial decisions are directly influenced by three critical neurotransmitters and biochemical messengers - oxytocin, serotonin and oxytocin. Apart from their essential importance in our survival by maintain our the spectacular biological functions ,these substances have to coexist in an extremely delicate balance and equilibrium.

For example, over secretion of testosterone hormone (it regulates the onset of puberty and for males the strength of the bones and muscles) is directly correlated with risk profiling of an individual and his trading patter in the market – impulsivity and thrill sensation seeking that can lead to undue and unfavorable risk taking investment decisions. Wining feels good for traders as for athletes and leads to additional push, more risk and a sense of invincibility, a push for short term performance. The testosterone is elevated in winners but is diminishes very fast in losing positions. Oxytocin – the more feminine hormone and neuropeptide relates to emotional bonding, memory and emotions or to the pain when this bond and love is interrupted. High levels of oxytocin secretion leads to less performance of sharp memory and attention and more reliance on good mood, cooperation, trust, generosity, long term planning. Probably this bonding mechanism that is directly related with the level of oxytocin, for both men and

[11] As Yogi Berra character said, "*In theory there is no difference between theory and practice, but in practice there is.*" The answer lies in the fact that no hypothesis is any better than the assumptions on which it's premised. Data on all forms of investing is freely available in vast quantities. Every investor has extensive computing power. In contrast, there were essentially no PCs or even four-function calculators before 1970, and no laptops before 1980. *Hedge fund*, *alternative investing, distressed debt*, *high yield bond*, *private equity*", *mortgage-backed security* and *emerging market* (the frontier market: Romania) are all household, buzz words today. Thirty years ago they were non-existent, little known or poorly understood.

From politics to economics, from technology an sports, today, "everyone knows everything. Nowadays few people make moral judgments about investments. There aren't many instances of investors turning down an investment just because it's controversial or unseemly. In contrast, most will do anything to make a buck. There are about 8,000 hedge funds in the world, many of which have wide-open charters and pride themselves on being infinitely flexible.

women, can be one starting explanation on how and why people behave in group, love to blend and look the same, express group and herd behavior and comfort of belongings to the group

Practicians in the investment management assert that econometric forecast models don't work in real life; particularly with the complexities of today's modern world. They maintain that is practically unwise to depend too much on models and that nothing can replace experience and intuition by assuming there is never perfect information and uncertainties always exist, so decisions must be made through judgment about the probabilities of potential outcomes.

Conclusions of the study

The article reviews some psychological concepts relevant and used in the study, in an interdisciplinary effort of understanding the correlation or causality between psychology and finance. The paper aims at demonstrating whether investor psychological biases lead to investment performance to tilt to the mean in the long run. As a reflection of the behavioral biases and influences, the statistical demonstration supports the conclusion that markets do not random walk.

Analyzing the data for this study leads to the interesting conclusion that individual psychological biases and differences should not be confounded with noise within econometric models but rather manifest a solid influential role on the dependent variable – the investment outcome. Data base source for the article shows that psychological characteristics have salient relationships with various aspects of investment decision making process making and the transactional activity of the individual investor.

The findings suggest that psychological biases can have an impact on risk return optimization, asset allocation on investment portfolios and finally on investment outcome. The sources of investor biases that lead to investor finance errors the investment management industry can apply the data for the development of products and services (automated pilot investing) that may help save investors from sabotaging their financial standing and future prospects. Also, new behavioral portfolio construction methods should combine evidently classic finance math with rigorously quantified psychological metrics to improve models for operators use in giving financial advice and crate investor portfolios that enhance investors chances for reaching their life time financial goals.

The gap between from theory to the practice of Behavioral Finance (BiFi- nickname) has direct application to the investment management practice. Students of Behavioral Finance can develop skills to be employed in their practices for their clients.

Behavioral Finance can teach about mental, emotional, psychological and social biases that lead to mistakes and biases o market efficiency, pricing anomalies and other market dynamics and risk – return investment outcomes. The new science of *BiFi*[12], or *PsiFi*[13] is transforming how we thing about relationship between the investor and the investing. With the advent of technology, the *Internet Investing*[14] is changing individual investors are managing their money.

The practical application of BiFi can help us discover how individual and group herd behaviors can lead to biased investment decisions, understand the resorts behind their decision making processes and develop practical tools to improve portfolio and risk management processes, so in the end to be better serve the client-owner of the funds managed an finally to help for the better good of society at large.

The public is searching for people to trust. More broadly, they viewed behavioral and ethically related attributes, such as transparent business practices, responsiveness in addressing issues, and integrity, as much more important than performance-centric metrics. An adviser's utility therefore is overwhelmingly bound up in his or her ability to uphold ethical principles in stewarding the customer's assets and future. Demands from customers on Main Street are ushering in a new era: the era of the fiduciary.

It is then full of social and professional merit why such big organization in though leadership in investment management and research as the CFA Institute® have developed a new fresh public mission on elevating the subject of trust and fiduciary duty to the customer of financial services and investment management advice and in the end to the society. Leaders in the industry urgently need to construct a culture that is built on a system of trust. Clients and their investment professionals must work as partners with aligned objectives, which means that a fiduciary culture is embodied by long-term compensation schemes built on client success, maximum concern for the caretaking of

[12] ***BiFi*** *– abbreviation from Behavioral Finance*

[13] ***PsiFi*** *– abbreviation from Psychology of Finance*

[14] ***Internet Investing*** *– this expression should encapsulate the trend of investment management and investmetn analysis profession on the last decade. Financial and investement services clients are becoming more sophisticated and more dedicated on doing their own research, on subscribing and using the information available on the internet and finally using internet brokers for their transaction only based services. Next generation of fiancial services clients will try to use less of outside, professional service. This will change dramatically the landscadpe of the industry.*

underlying beneficiaries, deeper investment in compliance and risk management, a fresh and honest look at leadership span to ensure strong internal control, simple and transparent financial product design and communication and finally a firm-wide public commitment to an ethical code of conduct and education.

Students of Behavioral Finance still have much to research on influence of psychological profile dissimilarities between individuals and how these dissimilarities manifest in real financial investment decision and behavior. Personality and other individual circumstances and differences systematically influence investment decisions.

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