

IFTA UPDATE

2017 Volume 24 Issue 4

IN THIS ISSUE

- 1 President's Report to Colleagues
- 3 Calendar-at-a-glance
- 4 Member News

Education Lounge

- 6 Wave Period Zone Oscillator
- 9 Market Fragility: Equity Markets Due for a Counter-Trend Reaction?
- 13 Skilled or Lucky?
- 19 A Baker's-Dozen Questions on Socionomics for Robert Prechter, President of Elliott Wave International
- 26 MFTA and CFTe Exam Dates
- 26 Congratulations New CFTes!
- 28 Congratulations New IFTA Board Members
- 28 *IFTA Journal* 2018 – Now Available!
- 29 *IFTA Journal* Call for Submissions
- 30 IFTA Member Societies
- 30 IFTA Update Schedule
- 30 Board of Directors

Next Issue: March 2018

Submission Deadlines

Education articles: February 15—
send submissions to newsletter@ifta.org

All other content: March 1—
send submissions to admin@ifta.org

Advertise in the UPDATE and reach more than 7,000+ IFTA colleagues worldwide. For more information, go to www.ifta.org/publications/newsletter/.

a newsletter for the colleagues of the International Federation of Technical Analysts

President's Report to Colleagues

Dear IFTA Colleagues,

As most of you are aware, in mid-October we held our 30th IFTA Annual Conference in Milan. The conference was hosted and organized by the Societa Italiana di Analisi Tecnica (SIAT).

With remarkable team effort, collaboration, and hard work, SIAT was responsible for delivering yet another spectacular, well-organized conference with a brilliant list of guest speakers, intriguing topics, and excellent choice of venue—not to mention the incomparable Italian cuisine in the beautiful city of Milan.

In recognition for their tremendous undertaking and accomplishment this year, I offer a special thank you to Davide Bugarelli, SIAT president and conference chair; Francesco Caruso, IFTA conference director; Daniela Cedele, social media manager and editor; Eugenio Sartorelli, Wladimir Biasia, Luca Giusti, Andrea Unger, Scientific Committee; and finally, Elena Ballestra, secretary—and all the conference committee members and SIAT colleagues who were involved in delivering such an outstanding event.

IFTA's AGM was held a day prior to the conference. Liaisons and representatives on behalf of your societies presented and shared their reports on the annual events and developments of their organizations. It is always inspiring to me to hear about how innovative, developed, and capable member societies have become over the years.

These liaisons and representatives also voted to elect two new board members. IFTA welcomes our new colleagues: Abdulwaheed Jatan (MATA) and Tamer Gamal (ESTA), who will be serving their first terms on the IFTA board. Also at the AGM, a vote to terminate the membership of one society within IFTA—the Association Tunisienne des Analystes Technique (ATAT-Tunisia)—was made.

31st IFTA Annual Conference (2018) News

Our next conference will be held in Kuala Lumpur, Malaysia, October 26–28, 2018, at the Kuala Lumpur Convention Centre. It will be the first time IFTA has held its Annual Conference in Malaysia. I look forward to attending the 31st IFTA Annual Conference in KL!

The IFTA UPDATE is a publication of the International Federation of Technical Analysts, Inc. www.ifta.org, a not-for-profit professional organization incorporated in 1986.

International Federation of Technical Analysts
9707 Key West Avenue, Suite 100
Rockville, MD 20850 USA
Email: admin@ifta.org • Phone: +1 240-404-6508

IFTA Member Societies

Earlier this year, IFTA granted the Malaysian Association of Technical Analysts (MATA) and Financial Technical Analysts Association (FTAA) full membership status. More recently in August, IFTA also accepted the Association of Technical Market Analysts (ATMA-India) and Bastiat Society Ghana (BSG) as developing member societies. Please join me in congratulating and welcoming our newest developing-member societies to our IFTA family!

Last, but not least, I would like to thank all member societies who shared updates and news from your local societies. Sharing information, knowledge, and experience is and will always be, in spirit, the reason why IFTA exists and continues to do so.

Best wishes for the new year and happy holidays to all!



Mohamed El Saiid, CFTe MFTA
IFTA President



31ST ANNUAL CONFERENCE

KUALA LUMPUR CONVENTION CENTRE

IFTA 2018 MALAYSIA

Hosted by



Kick-off:
25th October 2018
Conference:
26 – 28th October 2018



Calendar-at-a-Glance

Date	Topic	Host	Speaker	Location	Time	Contact
Monthly	Presentations from local and international speakers on a comprehensive range of topics (e.g., sharemarket, CFDs, options, futures, FOREX trading, methodologies, money management, psychology).	STANZ (New Zealand)	Various	Epsom Community Centre 200-206 Gillies Ave. Auckland, NZ	Varies	www.stanz.co.nz/
Monthly	Meetings are held monthly in nine cities across Australia. All monthly meetings are free to members. Visitors are welcome to attend. Bookings are not required. Visitors fee is \$30.	ATAA (Australia)	Various	Various	Varies	www.ataa.com.au/meetings
Monthly	Chapter leaders and their volunteer members serve as ambassadors for the CSTA and plan social and educational events for the area. Events include presentations by industry professionals and technical analysis experts and peer learning gatherings. Chapters also play a vital role in their communities by connecting individuals and promoting technical analysis.	CSTA Chapters (Canada)	Various	Various	Varies	www.csta.org
Monthly	Meetings & Events: The STA holds monthly meetings in London, usually on the second Tuesday of every month, except for a summer break in August.	STA	Varies	British Bankers Association • Pinners Hall 105 – 108 Old Broad Street • London EC2N 1EX	Varies	Katie Abberton, info@sta-uk.org
2017						
Dec	30	<i>Intraday Trades with Price Action</i>	ATMA (India)	Mr. Ranga Rao Swarna	.S. KRISHNAMURTHY HALL, The Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry, Federation House, 11-6-841, Red Hills, FAPCCI Marg, Hyderabad	9:30 https://www.atma.ac/events/upcoming-events.html
2018						
Jan	20	<i>Extracting the Power of Elliott Wave Method with Trend Following</i>	ATMA (India)	Mr. Ashish Kyal	Assembly Hall, St. Xavier's College, 5, Mahapalika Marg, Mumbai, Maharashtra- 400 001	13:30 https://www.atma.ac/events/upcoming-events.html
Feb	15	IFTA Update submission deadline for educational articles (mid-March release)	IFTA	NA	NA	Varies newsletter@ifta.org Attn: Aurélie Gerber, Journal Director
	28	Master of Financial Technical Analysis (MFTA) Alternative Path, Session 1 application deadline.	IFTA	NA	NA	NA http://www.ifta.org
Mar	1	IFTA Update submission deadline for news content (mid-March release)	IFTA	NA	NA	Varies admin@ifta.org
	2	Certified Financial Technician (CFTe) Level II—deadline to register for April examination	IFTA	NA	Varies	Varies admin@ifta.org
	9	Deadline to Register for CFTe II Exam on 19 April 2017	IFTA	NA	NA	NA admin@ifta.org
	15	Master of Financial Technical Analysis (MFTA) Session 1 paper submission deadline	IFTA	NA	Varies	Varies admin@ifta.org http://www.ifta.org
April	19	CFTe II Examination	IFTA	NA	Varies	Varies admin@ifta.org http://www.ifta.org
May	1	Certified Financial Technician (CFTe) Level II – registration opens for October examination through IFTA website	IFTA	NA	Varies	Varies http://www.ifta.org
	2	Master of Financial Technical Analysis (MFTA) Session 1 application, outline, and fees deadline	IFTA	NA	NA	NA admin@ifta.org
	15	IFTA Update submission deadline for educational articles (mid-June release)	IFTA	NA	NA	Varies newsletter@ifta.org Attn: Aurélie Gerber
	18-20	Practical Ways to Profit in Ever Changing Markets Conference	ATAA	High Profile Speakers - TBA	Melbourne, AU	TBA https://ataa.asn.au/contact-us
	31	IFTA Journal Call for Papers submissions deadline	IFTA	NA	NA	NA journal@ifta.org
June	1	IFTA Update submission deadline for news content (mid-June release)	IFTA	NA	NA	NA newsletter@ifta.org Attn: Aurélie Gerber
Jul	11	Summer Party and Awards Ceremony	STA	Stephen Hoad, The Stop Hunter	British Bankers Association, Pinners Hall, 150-108 Old Broad St., London EC2N 1EX	18:00 https://www.sta-uk.org/resources/meetings-events/
	31	Master of Financial Technical Analysis (MFTA) Alternative Path, Session 2 application deadline	IFTA	NA	NA	NA www.ifta.org

2018 continued

Aug	15	IFTA Update submission deadline for educational articles (mid-September release)	IFTA	NA	NA	Varies	newsletter@ifta.org Attn: Aurélie Gerber, Journal Director
Sept	1	IFTA Update submission deadline for news content (mid-Sept release)	IFTA	NA	NA	NA	admin@ifta.org
Oct	2	Master of Financial Technical Analysis (MFTA) Session 2 application, outline and fees deadline	IFTA	NA	NA	NA	admin@ifta.org
	TBA	Certified Financial Technician (CFTe II) Examination	IFTA	NA	Varies	Varies	admin@ifta.org; www.ifta.org
	26-28	IFTA 31st Annual Conference: Navigating Through Time and Volatility	IFTA & Hosted by MATA	Varies	Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia	TBA	admin@ifta.org
Nov	1	IFTA Journal Web publication	IFTA	NA	NA	NA	http://www.ifta.org/publications/journal/
	15	IFTA Update submission deadline for educational articles (mid-December release)	IFTA	NA	NA	Varies	newsletter@ifta.org Attn: Aurélie Gerber, Journal Director
Dec	1	IFTA Update submission deadline for news content (mid-December release)	IFTA	NA	NA	Varies	admin@ifta.org

Member News

Bastiat Society Ghana (BSG)

On November 3, 2017, at the Bastiat Society Ghana Inaugural Conference in Accra, Ghana, seven vetted candidates among the submitted list of suitable candidates were presented to take up the office of the Academy of Economists and Investment Bankers. They will lead the membership and financial players in the Republic of Ghana in investment banking training and technical analysis of derivative markets under the auspices of the International Federation of Technical Analysts.

The coronated officers who will forge the academy ahead in the areas of technical analysis, securities trading, and investment banking as a whole include the following:

- Prof. Emmanuel Tweneboah Senzu, Ph.D., DBA, CBE, President
- Mr. Isaac Nkrumah, B.Ed., M.Phil, CTA, Vice President
- Mr. Maclean Hughes Odonti, BA, MBA, CTA, Secretary
- Mr. Samuel Amoah Forson, B.Sc., CTA, Treasurer
- Mrs. Gifty Anowie, B.Sc., CEMBA, CTA, Accountant
- Mr. Fredua Agyeman, Dip.E., B.Ed., M.Ed., M.Phil., CTA, Organizer
- Mr. Selassie Mawufemor Newton, B.Ed., CTA, Public Relations Officer

The conference was attended by 36 active members. The theme was “Enhancing the Skills of Securities Traders, the Cornerstone of Vibrant Investment Banking Industry.”

The president of the Academy, Professor Emmanuel Tweneboah Senzu, acknowledged the government of the Republic of Ghana’s effort in strengthening and deepening its capital market through the office of the Securities & Exchange Commission and the Central Bank. He continued, even though much effort was exhibited after Ghana gained its independence at 1957, much is still to be fulfilled due to the dynamic growth of the global investment market and its innovations under asset derivatives. He further asserted that a developing economy like Ghana needs a strong research body to guide policymakers in investment decision- making and a formalized labor center to strengthen human resource power for the investment industry in Ghana. He reiterated that the Academy will be the knowledge house to complement government in equity market research and practice for the vision of deepening the capital market of Ghana and sustaining its economic growth in the corridor of the Finance and Investment Banking Department of Cape Coast Technical University, Central Region. ♣



Member News (continued)

Swiss Association of Market Technicians (SAMT)

The latest issue of the *Swiss Technical Analysis Journal*, produced by the Swiss Association of Technical Analysts (SAMT), is ready to read online at https://issuu.com/samt-switzerland/docs/samt_journal_autumn-winter_2017.

Inside this edition:

- A tribute to SAMT honorary member Dr. Hank Pruden
- A review of the IFTA Annual Conference in Milan
- Perry Kaufman on Portfolio Risk in Uncertain Times
- Robert Prechter on Socionomics—Interview by Ron William
- Alberto Vivanti on Trend Following in Portfolio Management
- Mario Valentino Guffanti reviews the Annual Lantern Fund Forum
- Dr. Van Tharp at the VTAI workshop in London—Interview by Ron William
- Phil Roth contributed talks about traders

SAMT successfully organized its third quarterly event—in Zurich and Geneva—ahead of this year's Annual Conference. Our exclusive international speaker was Robin Griffiths, head of the Multi-Asset Research & Advisory Team at the ECU Group, a global macro hedge fund based in London. He shared key market insights for the final quarter of 2017 and beyond, based on his signature "Roadmap" cycle model. A primary question that was asked is whether or not exogenous forces have broken the market cycle, led by the infamous decennial pattern. Also covered—the growing possibility of a 1987-style correction and how macro policy and geopolitical risks might prevail. A final highlight included top-ranking stock ideas, as produced by his proprietary technical Quintile Ranking Model™. SAMT members can access his presentation on the SAMT [website](#). SAMT received media recognition, with Ron William, VP and head of the SAMT Geneva Chapter, alongside two IFTA past presidents, Robin Griffiths and Bruno Estier, and hosted a special [SAMT media interview](#). †



L-R Ron William, Robin Griffiths, and Bruno Estier

Wave Period Zone Oscillator

By Akram El Sherbini

The wave period zone oscillator (WPZO) is a bounded oscillator for the wave period oscillator (WPO) and calculates the period of the market's cycle. In other words, the wave period refers to the time taken by buyers or sellers to complete one cycle. The oscillator moves within a range of -100 to 100 percent. As shown in Figure 1, the WPZO has overbought and oversold levels at +40 and -40 respectively. At extreme periods, the oscillator may reach the levels of +60 and -60.

The zero level demonstrates an equilibrium between the periods of bulls and bears. The WPZO oscillates between +40 and -40. The crossover at those levels creates buy and sell signals. In an uptrend, the WPZO fluctuates between 0 and +40 where the bulls are controlling the market. On the contrary, the WPZO fluctuates between 0 and -40 during downtrends where the bears control the market. Reaching the extreme level of -60 in an uptrend is a sign of weakness. Mostly, the oscillator will retrace from its centerline rather than the upper boundary of +40. On the other hand, reaching +60 in a downtrend is a sign of strength, and the oscillator will not be able to reach its lower boundary of -40.

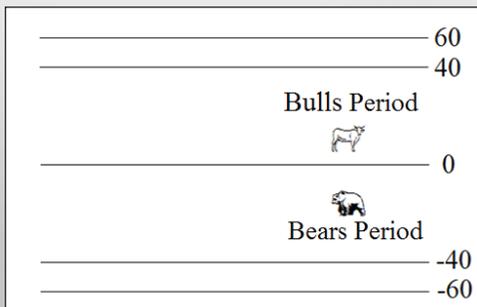


FIGURE 1. USD/YEN monthly chart since 1980

Calculation

$$y = A \sin\left(\frac{2\pi}{T}t\right)$$

The value of time t is the number of days on the chart. For example, t is equal to 1 for the first day and 2 for the second day. In this article, the value of t will be equal to 1, as the aim is to calculate T for each day separately. Therefore,

$$y = A \sin\left(\frac{2\pi}{T}\right) \text{ Or } y = A \sin \theta$$

The displacement y is the closing price of today. The amplitude A is the maximum extent of price displacement. It can be represented by the high of today's session, where $A = \text{High}$. The inverse of the sine function \arcsin is used to calculate the angle θ in degree where $\theta = \arcsin(y/A)$. The aim is to find the wave period, which is expressed in decimals. Therefore, θ is converted from degree to radian $\theta^{\text{rad}} = \theta \cdot (\pi/180)$, where π is a mathematical constant equal to 3.14. To calculate the wave period, one-day period T is equal to $2\pi / \theta^{\text{rad}}$ or $6.28/\theta^{\text{rad}}$.

The WPZO calculation consists of two main parts: The variable period VP and the total period TP . The variable period is equal to a 14-day exponential moving average of " $\pm T$ ", and the total period is equal to a 14-day exponential moving average of T . If the closing price C is greater than yesterday's closing price C_y , then the period T is positive. If the value of C is less than C_y , then the value of T is turned negative.

- $T = +T$ if $C > C_y$
- $T = -T$ if $C < C_y$
- $VP = \text{EMA}_{14}$ of $\pm T$
- $TP = \text{EMA}_{14}$ of T
- $WPZO = (VP/TP) \times 100$



Day	Closing Price	Amplitude	Sin Angle $\sin \theta_r$	Angle in Radians θ_r	Period $\pm T$
	C	High	C/A	$\arcsin .$ ($\sin \theta_r$)	$6.28 / \theta_r$
1	43.07	43.83	0.983	1.38	4.54
2	43.44	43.9	0.990	1.43	4.40
3	43.54	44.05	0.988	1.42	4.43
4	41.97	43.54	0.964	1.30	-4.83
5	41.99	43.11	0.974	1.34	4.68
6	41.81	42.43	0.985	1.40	-4.49
7	41.22	42.31	0.974	1.34	-4.67
8	41.55	42.01	0.989	1.42	4.41
9	40.98	42.09	0.974	1.34	-4.68

TABLE 1. Data sample for the calculation of one-day period

Trading Tactics

The WPZO trading tactics consist of uptrend, sideways, downtrend, and exit at weakness tactics, as shown in Figure 2.

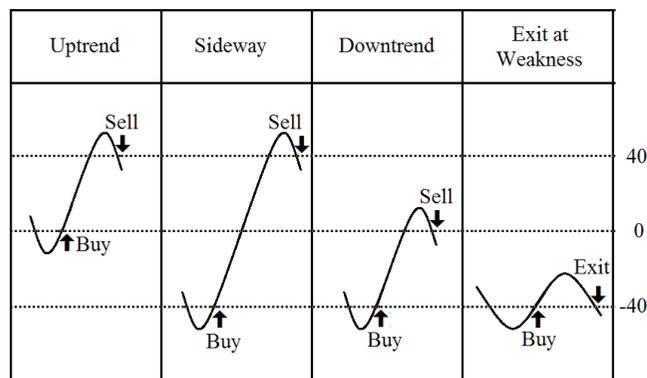


FIGURE 2. WPZO signals during trends

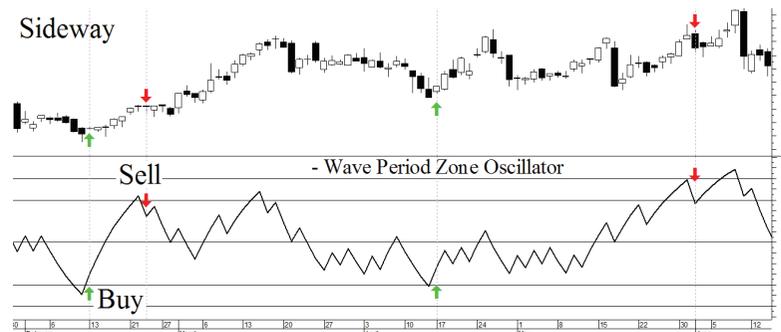


FIGURE 3. NASDAQ—daily values of Texas Instruments (TXN.O)



FIGURE 4. NYSE—weekly values of PepsiCo Inc. (PEP)



FIGURE 5. Egyptian Stock Exchange—daily values of Amer Group (Amer.CA)



FIGURE 6. Egyptian Stock Exchange—daily values of Commercial Intl Bank. (COMI.CA)

During an ideal uptrend, the WPZO does not reach the lower boundary of -40 and usually rebounds from a higher level than -40. This means that the bulls have taken control earlier. Hence, a zero-line crossover generates a buy signal. The WPZO crosses the upper boundary at +40, then pulls back again below +40 to generate a sell signal. During sideways, the WPZO fluctuates between the lower and upper boundaries of -40 and +40. This tactic is also used in an uptrend where corrections are strong enough to drive the WPZO line below the lower boundary. During downtrends, the WPZO fails to reach the upper boundary and oscillates between the 0 and -40 levels. The bears enter early, indicating an obvious weakness in the market. Therefore, crossing the zero level generates a sell signal. The exit at weakness tactic is used during uptrend reversals and downtrends. The WPZO oscillates between the centerline and the lower boundary of -40. The bears are controlling the market and move in wide cycle periods, while the bull's strength is almost absent. An exit signal is triggered once the WPZO crosses -40. When prices decline, the WPZO may cross its extreme lower boundary at -60. Therefore, a swift exit signal is triggered once the WPZO crosses -40.

The WPZO gives an insight about the relation between time and price movements. In this article, we used the oscillator to differentiate between the time taken by bulls and bears to complete one cycle. Due to the boundaries effect, the WPZO may diverge less than the WPO with prices.

References

1. El Sherbini, Akram. "Time Cycle Oscillators," IFTA Journal 2018: p. 66.
2. Grafton, Christopher. Mastering Hurst Cycle Analysis: A Modern Treatment of Hurst's Original System of Financial Market Analysis. 1st ed. Harriman House, 2011.
3. Hurst, J. M. Cyclic Analysis: A Dynamic Approach to Technical Analysis. 1st ed. Traders Press, 1999.
4. Murphy, John J. Technical Analysis of the Financial Markets. New York Institute of Finance, 1999.
5. Pence, Denice, Michael Olinick, and Earl Swokowski. Calculus. 6th ed. Brooks Cole, 1996.
6. Serway, Raymond A., and John W. Jewett. Physics for Scientists and Engineers. 6th ed. Thomson Brooks/Cole, 2004.

Software and Data

Data and charts used in this article are provided by Thomson Reuters data feed and Metastock software.

Appendix: Indicator Codes

Metastock

```
n:= 14;
Cy:= Ref(C,-1);
WaveDisplacement:= C;
WaveAmplitude:= H;
Sinwt:= WaveDisplacement/WaveAmplitude;
SinSquare:= Power(Sinwt, 2);
CosSquare:= 1-(SinSquare);
Coswt:= Sqrt(CosSquare);
Angle:= atan(Sinwt,Coswt);
AngleInRadian:= 3.14*Angle/180;
Equation:= 6.28/AngleInRadian;
PeriodToday:= If(C > Cy, Equation, -Equation);
VP:= Mov(PeriodToday,n,E);
TP:= Mov(Equation,n,E);
WPZO:= VP/TP*100;
WPZO
```

Amibroker

```
n = 14;
Cy = Ref(C,-1);
WaveDisplacement = C;
WaveAmplitude = H;
Sinwt = WaveDisplacement/WaveAmplitude;
Angle = asin(Sinwt);
Equation = 6.28/Angle;
PeriodToday = iif(C > Cy, Equation, -Equation);
VP = EMA(PeriodToday,n);
TP = EMA(Equation,n);
WPZO = VP/TP*100;
```

About the Author



Akram El Sherbini holds a B.Sc. in physics from the American University in Cairo. He is currently studying for an MBA at Heriot-Watt University. El Sherbini has been involved in financial markets since 2007. Prior to freelancing, he was a technical analyst at Synergy Capital Markets and a team leader at Candle Egypt. His focus is on creating new technical indicators as well as developing unified trading systems for equity and FX markets. El Sherbini is also a member in the Egyptian Society of Technical Analysts (ESTA).

Market Fragility: Equity Markets Due for a Counter-Trend Reaction?

By Robin Griffiths, FSTA, and Ron William, CMT, MSTA

The S&P 500 is warning of growing fragility as it hits an 8-year trend resistance, pressured by historically overbought conditions. In Figure 1, downside risk levels can be found at 2440-50, which is currently marked by the long-term

200-day or 40-week average and our probability distribution price analysis. Lower price targets can be found at 2100, which is uptrend support from the old 2009 lows, as highlighted by the slow-rising regression line (factor 3x1),

based on the work of W D Gann. The prediction now is there should be a three-wave fall into the new year, as marked by our cycle studies (lower panel B). This is contrary to traditional seasonality trends, which historically

outperform during the months of November to January as part of a year-end "Santa-Claus" rally, where institutional portfolio managers rebalance their books and investor psychology is more upbeat.



FIGURE 1. S&P 500 Weekly Chart
Source: Optuma© RW Advisory Ltd.

However, "this time may well be different" due to the fact that we have still not witnessed an equity market setback during the past autumn months, thereby intensifying the asymmetric nature of the cycle. Our expectations for a correction during the new year of 2018 will involve a fall, followed by a rally, then the rest of the fall. The absolute minimum drop should eliminate all the rise of this past year of 2017 and go back to the low just before President Trump was elected. Targets near 1800 are reasonable. It is entirely possible for a larger downtrend to develop from this point onward.

The Elephants in the Room

The S&P 500 is an index that rocketed by 300%, fueled like many others by the weighting of highly valued market cap stocks. When we look at the stocks that have driven most of the rise, we find that it is only a few huge market cap stocks that have done the business. These are covered by the acronym FANG (Facebook, Apple, Netflix, and Google or Alphabet). Figure 2 shows Facebook, which triggered a total rise that has approximately doubled the overall index.

It is typical of the stocks that have been holding up the entire index. There are very few of them. This introduces a degree of fragility into the market. It is like skating on very thin ice. Technically speaking, Facebook is now pressured under a 6-year-old Gann resistance into a key cycle window. Momentum indicators also signal long-term divergences that would deteriorate under the 62% threshold. Meanwhile, our bearish price risk level is at 158. A sustained break here would unlock sharp losses into a confluence support zone between 126-127 and 116-119.

If Facebook or another of the FANG stocks were to have a setback, then the entire index would drop rapidly. Typically, these few stocks do not have earnings. They are not cheap in fundamental terms, but they do have a good story behind them. All the money that is passively invested in indexes has been effectively herded into these few holdings, and it has paid off well so far. However, it has produced bubble-like conditions in these markets, and this is vulnerable to a sudden correction, akin to what happened in 1987.

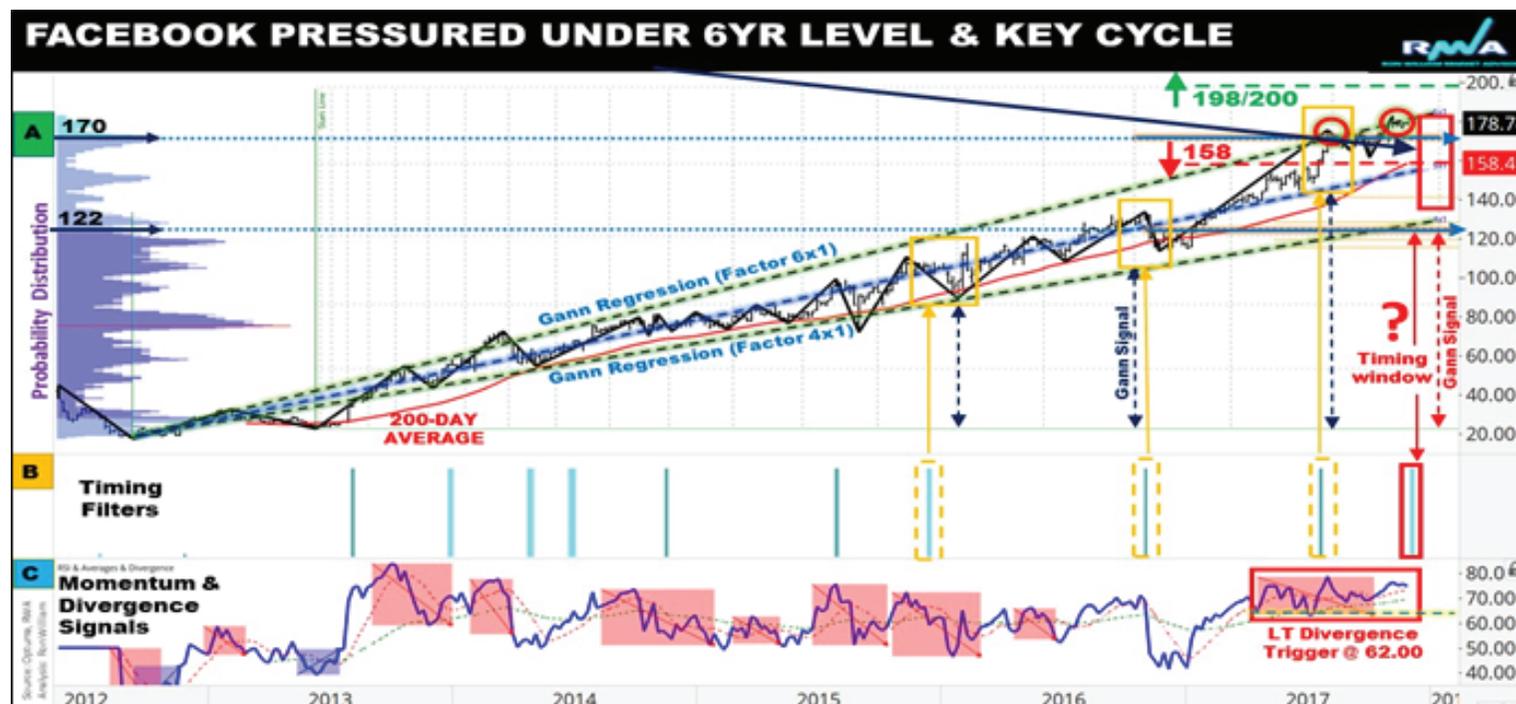


FIGURE 2. Facebook Weekly Chart
Source: Optuma© RW Advisory Ltd.

Old Economy Fading

When we look at the companies that always used to be regarded as the backbone of corporate America, we find a very different story. Here, the share price peaked in 2012-2013, and it has been a bear market ever since. IBM, Walmart, General Electric, to name but a few, all tell the same story. Most of the old-economy, so-called “best stocks” are in a bear phase and not doing well. These days, their market cap is not large enough to dominate the index as they used to, but these are the

stocks that have earnings and pay dividends. Even so, they are giving us a strong warning signal, with IBM already reverting to its old Y2K peak, currently trading under its 12-month average, and the mid-Gann regression line (factor 6x1). Expect a targeting of the support zone 110-117, with risk to 75-85 (Figure 3). There also seems to be further cycle pressure ahead, weighed down by bearish momentum, which is capped under the key level at 60 (lower panel C).

The final warning comes from the bond market. In the past, whenever the rate of interest has bottomed and started to trend up, it has been only a matter of time before the equity market has a correction. All in all, we would rebalance the portfolio now and only hold those U.S. equities that we are willing to live with for the long-term, regardless of price fluctuations. †



FIGURE 3. IBM Monthly Chart
Source: Optuma© RW Advisory Ltd.

Education Lounge

Disclaimer and Disclosures

No information published constitutes a solicitation, offer, recommendation, or advice to buy, sell, or hold any investment instrument, to affect any transactions, or to conclude a legal act of any kind whatsoever.

The information published and opinions expressed are provided by RW Advisory (RWA) for personal use and for informational purposes only and are subject to change without notice. RWA makes no representations (either expressed or implied) that the information and opinions expressed are accurate, complete, or up to date.

In particular, nothing contained constitutes financial, legal, tax, or other advice, nor should any investment or any other decisions be made solely based on the content.

All opinion is based upon sources that RWA believes to be reliable, but they have no guarantee that keeps this the case. Therefore, while every effort is made to ensure that the content is accurate and complete, RWA makes no such claim.

Limitation of Liability

RWA disclaims, without limitation for any loss or damage of any kind, including any direct or indirect consequential damages.

Copyright

All material produced is copyright protected by RWA and may not be copied, emailed, faxed, or distributed without the express permission of RWA.

About the Authors



Robin Griffiths, FSTA, is chief technical strategist at ECU Group, a role he previously performed at HSBC Investment Bank for 20 years before becoming head of Global Asset Allocation at Rathbones, and then a director and technical strategist for Cazenove Capital Management.

Robin was a partner of WI Carr and head of technical analysis at Grieveson Grant. Robin is a committee member and former chairman of the IFTA, and former chairman, now fellow, of the British Society of Technical Analysts. Robin has been a member of ECU's Global Macro Team for over 20 years



Ron William, CMT, MSTA, is an accomplished market strategist, educator, and trader with 18 years of financial industry experience, working for leading economic research and institutional firms and producing macro research and trading strategies. He specializes in macro, semi-discretionary analysis, driven by cycles and proprietary timing models.

Ron is a board member of the IFTA, part of its Education Committee, vice president and head of the Geneva Chapter of the Swiss Association of Market Technicians (SAMT), and honorary member of the Egyptian Society of Technical Analysts (ESTA). He holds both the MSTA and CMT professional designations. He is also co-founder of the SAMT CFTe Immersion Course. †

Skilled or Lucky?

By Dan Valcu, CFTe

500% gains in Bitcoin day trading over the past six months? +10% in EUR/USD in only 10 days? A 20% pop in trading technology stocks in three months? A fund that performs 10% over market benchmark? Reflect on your last trades or the performance of the fund you manage or are invested in: Are the results generated by gut instinct or a well-thought strategy with proven, consistent positive results? Do you see yourself as skilled or lucky?

If the answer is “skilled,” the charts in the three figures that follow require careful attention and may alter this view. They replicate and illustrate a random stock selection experiment where a monkey throws darts at the stock pages in a newspaper. The portfolios are held for a period and results are compared to a benchmark (S&P 500).

Figures 1, 2, and 3 show the dynamics of this random process. The animated charts are self-explanatory and show that fund managers and traders work intimately with Lady Luck as an advisor.

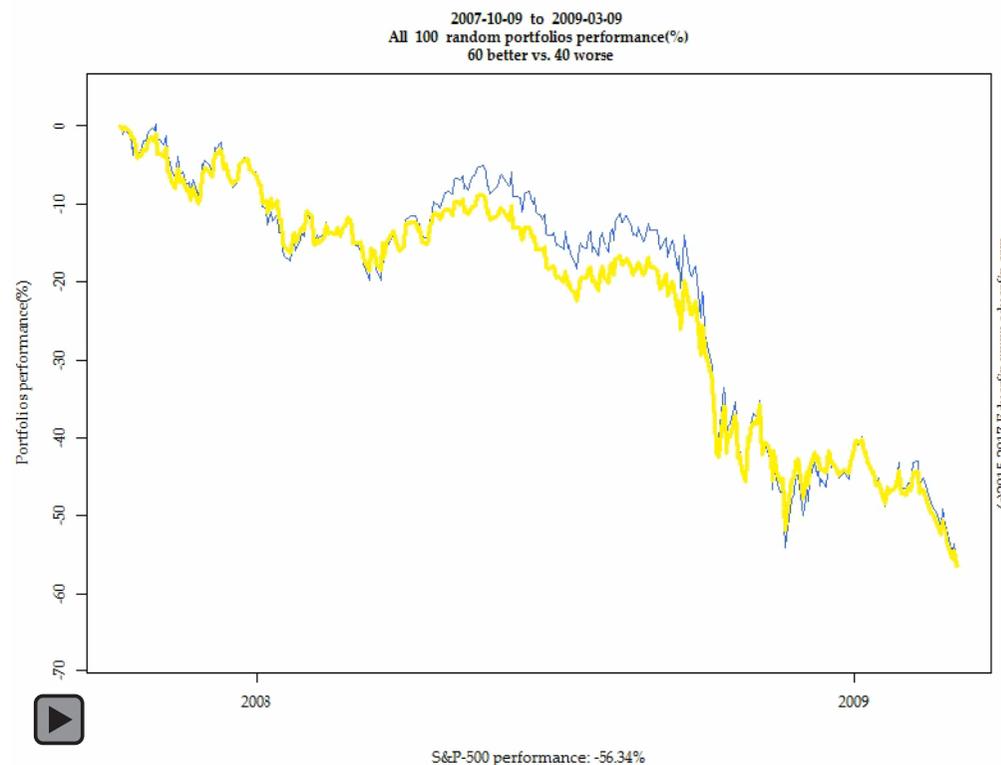


FIGURE 1. Monkey portfolio for 2007/10/09 (top) – 2009/03/09 (low). Despite the vicious bear market, 60% of the random portfolios performed better than the benchmark (yellow). 100 portfolios, each having max(*) 100 S&P 500 stocks. S&P 500 universe is as of 2017/12/01.

Education Lounge

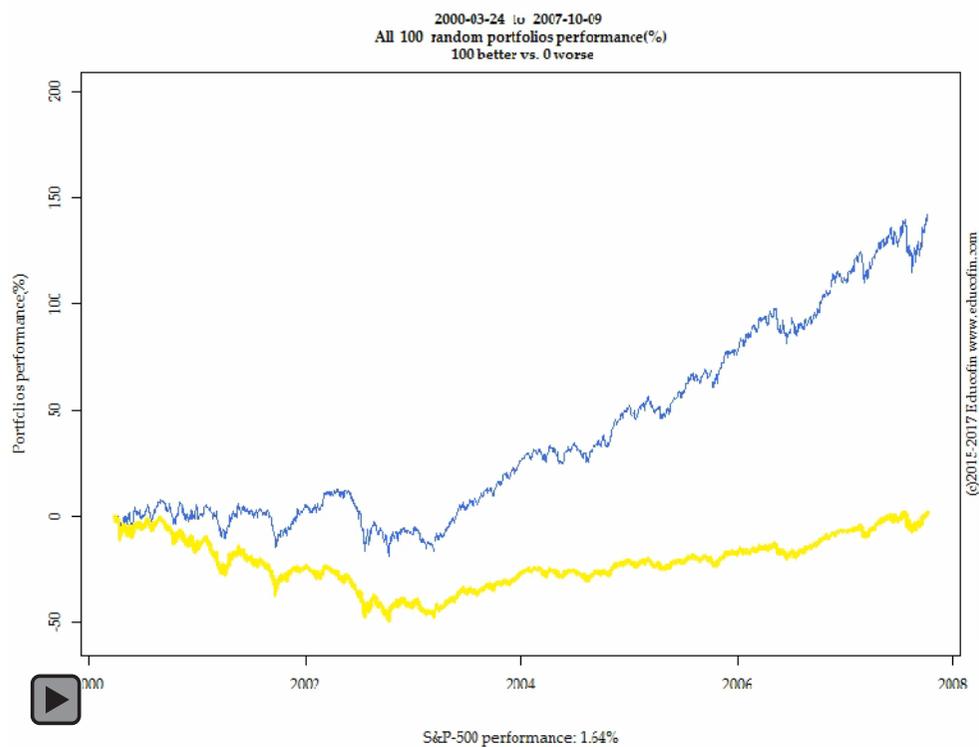


FIGURE 2. Monkey portfolio for 2000/03/24 (top) – 2007/10/09 (top). For this period when the benchmark was almost zero, all random portfolios scored gains better the S&P 500 index. 100 portfolios, each having max(*) 100 S&P 500 stocks. S&P 500 universe is as of 2017/12/01.

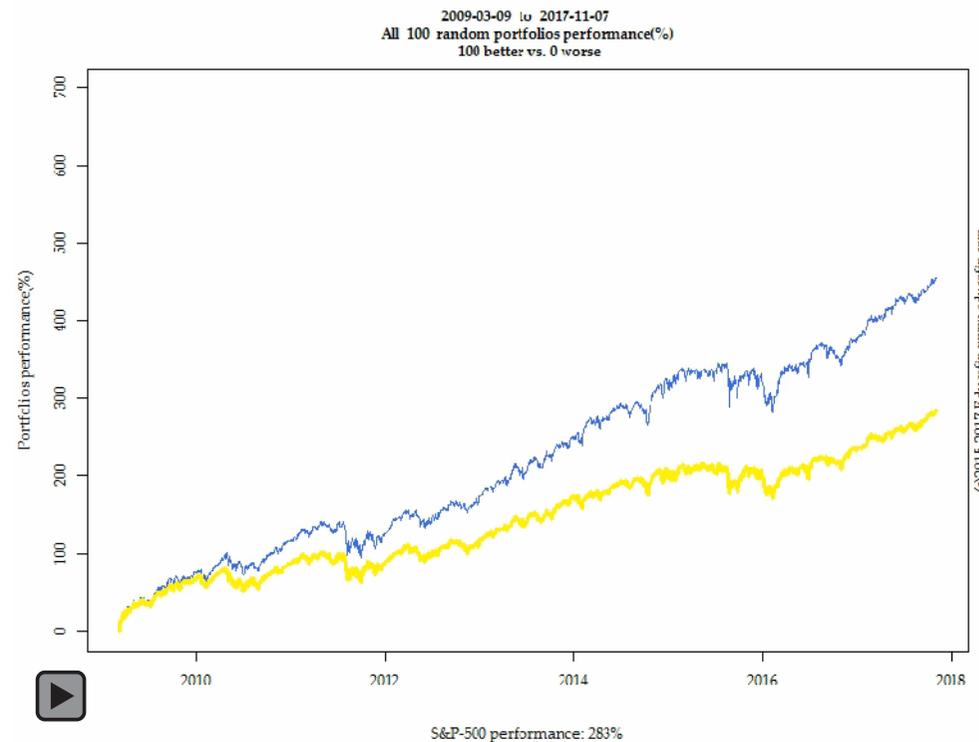


FIGURE 3. Monkey portfolio for 2009/03/09 (low) – 2017/12/01. All 100 random portfolios performed better than the benchmark's performance of 283%. 100 portfolios, each having max(*) 100 S&P 500 stocks. S&P 500 universe is as of 2017/12/01.
(*) survivorship bias

Skilled or Lucky *continued*

Education Lounge

In trading and investing we evaluate options, make or walk away from decisions, and observe results within a complex environment. The outcome depends in great measure on the quality of the decisions we make—from how a trade is set up to how it’s closed.

This article, the first in a series of two, intends to bring some light to an area—trading and investing—where skills are taken *for granted* when, in fact, they are grossly overestimated or missing.

Everybody meets both skill and luck without paying much attention to them. We take the results, good or bad, and proceed into to the next experience, with the hope that things will get better. When this process is repeated and without an analysis on what really influences the results, we hit a wall and are forced to uncover the *real* drivers of performance. Let’s stop for a moment and pay more attention.

- How important are skills and luck in trading and investing, and what are their respective roles?
- When we win, are we skilled? And when we lose, are we just unlucky?
- What are the strong forces against our best intentions?
- Can we improve trading/investing skills and reduce luck?
- Can we measure skills and luck?

These are some of the questions I will try to address in this series, leaving the reader to close Pandora’s Box.

The Magic Spice

Recently in Brazil, Lewis Hamilton, a four-time F1 champion, started from the last position and finished the race in 4th place. Serena Williams is another example of a top performer with a special longevity, as is Federer, who joins the same class of exception. Leonardo da Vinci, Warren Buffet, the MIT card-counting students featured in the movie “21,” and NASA expeditions to the edge of and outside our solar system are all examples of situations where skills play the dominant role in achieving *repetitive* exceptional results. Luck also exists, but its influence is so limited that it doesn’t even count toward the outcome. You can’t go to Pluto based on luck, or win consistently in the markets with a luck-based strategy. So, this begs the question “*Why are these people so successful?*” The answer lies in the fact that they build and hone their skills continuously, have a tight control on adversities, and leave no room for luck.

When trading, betting, and exceptional performance are involved, skills are scarce. Luck fills the void, takes over, and generates losers.

Skill and Luck? Skill or Luck?

The reality is that skill and luck coexist and are inseparable.

You can be very skilled and have an occasional push from luck, but you should forget about being lucky and assume that skills are behind your good performance (try this with a slot machine). Trading/investing on luck is a pure fantasy. The reality is that a very large number of people *believe* they are skilled, when in fact they are lucky until they aren’t any longer.

If *positive performance* covers gains over ticks, minutes, or even hours, good luck may be enough to *assume* the presence of skills and define performance as skills-driven.

If it covers a long period of time, luck is out of question. You need strong and lasting skills to achieve long-term positive performance.

Figures 4 to 7 show the risk of ruin when one runs a strategy based on pure luck (probability = 0.5). Despite periods of uptrends that may be sold as evidence of skills, the result, sooner or later, is *ruin*.

Figure 4: Risk of ruin (probability = 0.5)
Start capital = 100 Final capital = 0

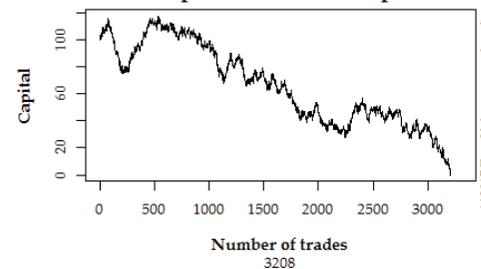


Figure 5: Risk of ruin (probability = 0.5)
Start capital = 100 Final capital = 0

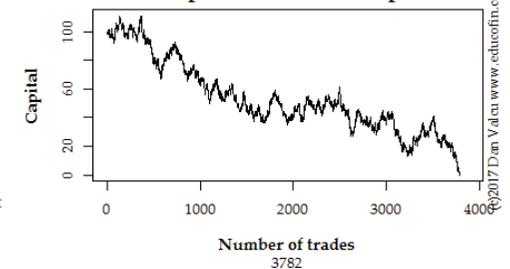


Figure 6: Risk of ruin (probability = 0.5)
Start capital = 100 Final capital = 0

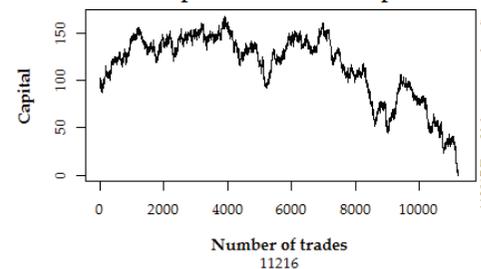
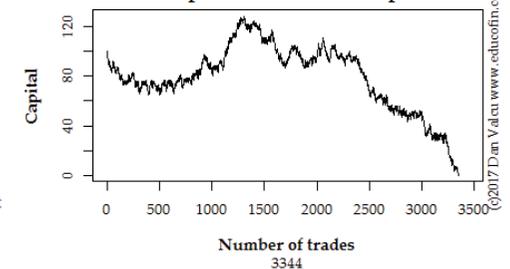


Figure 7: Risk of ruin (probability = 0.5)
Start capital = 100 Final capital = 0



When skill is involved (probability greater than 0.5), gains follow (Figures 8 to 11).

Figure 8 : Risk of ruin (probability = 0.55)
Start capital = 100 Final capital = 1000

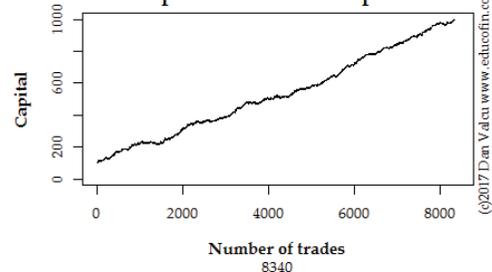


Figure 9 : Risk of ruin (probability = 0.55)
Start capital = 100 Final capital = 1000

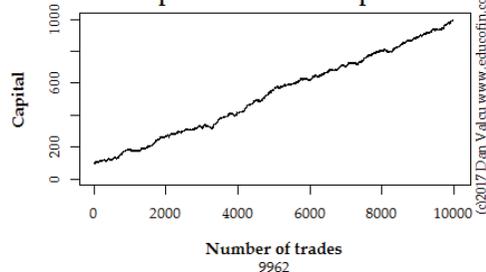


Figure 10 : Risk of ruin (probability = 0.55)
Start capital = 100 Final capital = 1000

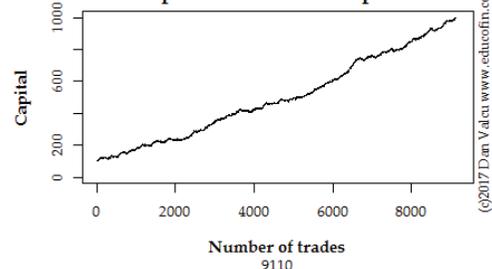
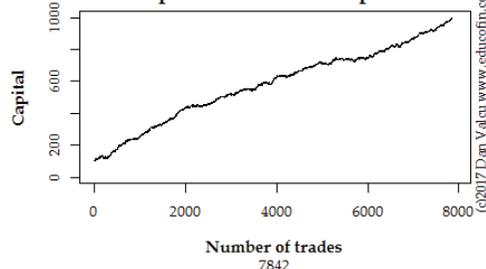


Figure 11 : Risk of ruin (probability = 0.55)
Start capital = 100 Final capital = 1000



In plain English, skill may translate into “I really know what I am doing,” and luck implies “Oops! I made a mistake” or “Thank God, I was so close missing it.” Even from these intuitive definitions, we realize that skill is related to longer timeframes, while luck—good or bad—covers very short periods of time.

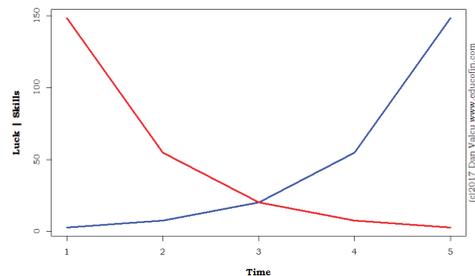


FIGURE 12. The ideal evolution of skill (blue) and luck (red) with time. Skill should increase and luck should diminish over time.

If we define:

$$\text{Performance} = \text{Returns} - \text{All expenses associated with the returns}$$

then

- **Skill** = cumulative performance > 0 as function of time (delta T = long and continuous)
- **Luck** = cumulative performance < 0 | > 0 as function of time (delta T = discrete and many)

When asked to choose between luck and skill, the answer is immediate: *we all want to know—and show—we are skilled.* Despite the positive tone, strong forces are fighting against us and our best intentions. Why is skill in trading/investing so difficult to acquire and cultivate?

Cognitive Biases, Our Enemies for Life

Considering all inputs that go into decision-making processes related to trading/investing, it’s surprising to see the focus remaining on exotic and complicated formulas and techniques, while little attention is paid to the way the brain works. The brain, which *de facto* influences us as traders/investors, affects our decisions, actions, results, and finally, our performance. Its lethal weapons are called cognitive biases.

“A cognitive bias refers to the systematic pattern of deviation from norm or rationality in judgment, whereby inferences about other people and situations may be drawn in an illogical fashion. Individuals create their own “subjective social reality” from their perception of the input. An individual’s construction of social reality, not the objective input, may dictate their behavior in the social world. Thus, cognitive biases may sometimes lead to perceptual distortion, inaccurate judgment, illogical interpretation, or what is broadly called irrationality.” (Source: www.wikipedia.com)

This definition is a clear description of what happens when we make decisions, and in many cases, the lack of logic that accompanies them.

Before enumerating some biases, don’t forget that skill is built and honed on a *long series of decisions that match the expected outcome.* As we all want to make good decisions, you can imagine the fierce conflict between us as investors and the biases we face. Below, you’ll find some common biases that distort the line between skill and luck:

Dunning-Kruger effect. People with low ability in a certain field suffer from illusory superiority, and those with high ability suffer from inferiority. This bias applies specially to retail traders and investors. One remedy? Go through a self-awareness program and see if you *really* can deal with the complexity of trading/investing.

Inability to make good/reliable predictions. Everybody tries, reads about, or watches someone making a forecast of a price, a top, or a low in the markets. The results, as we all know, are poor. No surprise: human forecasting skills are bad. It's easier and safer to focus on trends and short periods and not on uncertain future events.

Grandiose delusions. While not as common as the Dunning-Kruger effect, this bias describes the belief that one is wealthy, very smart, and powerful in life (and in the markets) and can be considered a kind of narcissism. The bias distorts all messages life and the markets send us, and hence, alters our ability to make rational, objective decisions.

Confirmation bias. A predisposition to search only for information that supports one's own views, decisions, beliefs. "It's what I think and nothing else." This bias is very common in the trading and investing world and like every bias, it reduces the amount of objective information we process to make sound decisions.

Information bias. The tendency to gather additional information when it's not necessary. More information = Confusion = Poor decisions = Poor performance. One example is the use of an excessive number of (positively correlated) indicators and the use of exotic/odd techniques. In other words, more noise.

Self-serving bias. The tendency to show only success and not failure. It's common when displaying trading and investing results/performance. If you are on the receiving end (buyer of services and products), you need to know where and how to search for the real picture.

Framing bias. A propensity to look at the narrow picture, leaving the rest outside the story. Similar with confirmation and framing biases. Short-term results in a bull market are more sellable than those starting 20 years ago.

Belief bias. Being blinded by your own beliefs and falsifying the conclusion.

Emotional bias. The inclination to easily accept arguments that offer a pleasant feeling and

reject those that cause negative reactions. Like narcissism, self-serving, and belief biases.

Fallacy bias. The use of faulty reasoning to construct an argument. Short sellers and big contrarians are examples of this bias in a bull market, or trying to find an excuse for a mistake.

Any cognitive bias, when attached to a decision, builds shaky ground for the outcome. More biases mean more confusion, more losses, poor performance, and diminished skills. Finally, they lead to calling on Lady Luck to the rescue.

Can Skills Be Measured?

Figure 13 shows four scenarios related to a benchmark (black):

1. A strategy that achieves the same final performance as the benchmark (red)
2. A strategy that is above the benchmark by 25% (blue)
3. A strategy that is 5% better than the benchmark (green)
4. A strategy that is over 20% above the benchmark (pink)

Which strategy is the best one and why? This question opens doors to different opinions about skill and luck, about what is 'best' and 'why.'

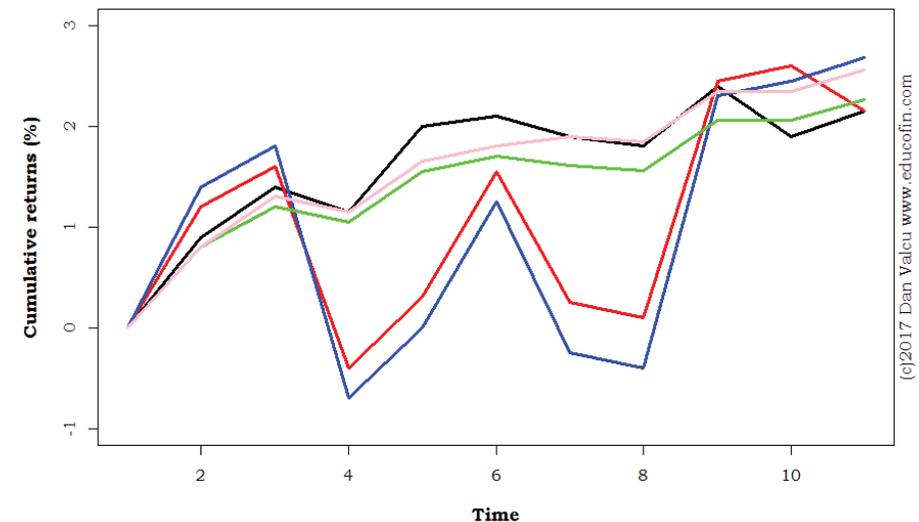


FIGURE 13. Four scenarios and a benchmark. What is the best one and why?

©2017 Dan Vaicu www.educofin.com

Skilled or Lucky continued

Education Lounge

As with everything in life, we can assess skill levels by measuring performance vs. chosen yardsticks. Ignoring or manipulating the results distorts the *real* picture of existent skills.

One immediate, acceptable, but misleading measure is the size of positive assets accumulated during a period in the markets. *"How much money did I make? How many successful trades did I run?"*

Misinterpretation (and in many cases, manipulation) of the results may be caused by:

- The length of the period by choosing one that favors positive results we need to show.
- Ignoring all expenses incurred.
- Avoiding showing drawdowns.
- Choosing benchmarks that favor a positive performance.
- Displaying percentages of gains vs. losses instead of amounts.

As you can see, there are always ways (cognitive biases) to successfully translate a poor or mediocre performance into a good one. Measuring skills should be an objective process with no room for interpretation and limitations.

The next article will discuss some mathematical measures for skills that will add support to the idea that luck is too widespread in investing.

Conclusions

- Skill and luck coexist. It's hard work to control them, but possible through self-awareness and training.
- Cognitive biases are real strong forces fighting back when we want to build solid skills and have less reliance on luck.
- Too often, luck is packaged, presented, and rewarded as skill. Due to cognitive biases and incomplete information, the perception of skills varies widely, from real to fabricated (manipulation of the buyer).
- Skills are built and honed on series of good decisions. Luck should be an accident, a one-off event.
- Top performers work on building skills, while losers work on improving luck.

- In real life, trading and investing skills are overwhelmed by good and bad luck.
- Despite our own positive beliefs about ourselves, understanding cognitive biases brings us down to earth and offers a realistic picture of where we stand vis-à-vis skills.
- Our ability to control negative predispositions of cognitive biases makes the difference between skill and luck.
- Leaving cognitive biases to take over our brain is an invitation to decisional chaos generated by luck.
- Skill and luck can be measured.
- Measuring and translating the results depend on whether you are a seller of services (you try to claim skills), a buyer (easy to be manipulated having limited information on what skill is), or a provider of services to yourself (dangerous self-deception).

Suggested Reading

Cognitive biases, www.wikipedia.com

Why Most Predictions Are So Bad, <https://www.forbes.com/2011/03/17/why-predictions-bad-leadership-managing-forecast.html#9ff5659729cd>

About the Author



Dan Valcu, CFTe, is the author of two books on Heikin-Ashi trend technique and its applications in trading and investing. He focuses on cognitive biases in trading and their multiple impact on performance. Dan can be reached at www.educofin.com

A Baker's-Dozen Questions on Socionomics for Robert Prechter, President of Elliott Wave International

By Ron William, IFTA Education Committee

Robert R. Prechter is known for developing a theory of social causality called *socionomics*, and for his career applying and enhancing the Wave Principle, R.N. Elliott's hierarchical-fractal model of financial pricing. Prechter has authored/edited 18 books on *socionomics* and finance, including a New York Times best seller. His 2016 book, *The Socionomic Theory of Finance*, aims to replace conventional financial and macroeconomic theory with a new paradigm based on *socionomics*. Prechter has presented *socionomic* theory to academic conferences and universities, including the London School of Economics, the University of Oxford, the University of Cambridge, Georgia Tech, and MIT. Prechter and his colleagues' paper, "Social Mood, Stock Market Performance and U.S. Presidential Elections" (2012), was the third most downloaded paper on the Social Science Research Network that year. Prechter graduated from Yale University in 1971, joined the Market Analysis Department of Merrill Lynch in New York in 1975, and founded Elliott Wave International in 1979, where he has published monthly market analysis in *The Elliott Wave Theorist*. Prechter served for nine years on the board of the Market Technicians Association and served as its president in 1990–1991. He is a member of the Triple Nine Society and the Shakespeare Oxford Society. For more, visit www.robertprechter.com.



Ron William (RW): What inspired your discovery of socionomic theory?

Robert Prechter (RP): I was drifting toward *socionomic* thinking when I was 19 years old. In early 1969, I wrote a college paper assessing a brief history of popular song lyrics for expressions of attitudes toward achievement and suggested that they portended economic changes. The idea that the stock market and popular culture were linked crystallized in my mind in late 1975, shortly after joining the Market Analysis Department at Merrill Lynch in New York. I was musing about tonal changes in Beatles records that occurred in 1965–1966 while perusing a wall chart of the stock market. I suddenly realized that the tone of popular music overall ebbed and flowed with the stock market. That's when I first sensed that I had recognized something new.

The more I watched the stock market, the more it became obvious to me that news does not lead stock prices, nor is it unrelated. News lags stock prices. Economists claim the reason for this relationship is that investors anticipate the future. I have never met these clairvoyant investors. I concluded that something immediately causal to stock market movement must be producing compatible yet slightly delayed results in economic, cultural, and political changes. Knowing something about Elliott waves led me to an answer: *waves of social mood*.

From 1976–1978, I became completely committed to *socionomic* causality. I have a letter I sent to my dad in February 1979, where I wrote, "The state of business is a *consequence* of the changes in mood." I underlined the word *consequence* and used the term *mood*. To get a feel for what adopting this causality means, you can read the contrasting statements in Table 1.

In April 1979, I went independent and started a financial publishing company. In August of that year, I issued my first declaration of *socionomic* causality. Although the bulk of my time was dedicated to business, in 1985 I managed to publish a long report titled "Popular Culture and the Stock Market," which was boiled down for a *Barron's* article. [These items are reprinted in *Pioneering Studies in Socionomics*.—Ed.] That sort of kicked things off.

By the late 1990s, I had become a purist. I was able to show that every exogenous-cause argument was wrong and that *socionomic* causality successfully explains the same data. I gathered all my ideas on the

MECHANICAL CAUSALITY (exogenous cause)	SOCIONOMIC CAUSALITY (endogenous cause)
<i>Social events determine the tenor and character of social mood.</i>	<i>Social mood determines the tenor and character of social events.</i>
<i>Examples</i>	<i>Examples</i>
"Recession causes business people to be cautious."	"Cautious business people cause recession."
"Talented leaders make the population happy."	"A happy population makes leaders appear talented."
"A rising stock market makes people increasingly optimistic."	"Increasingly optimistic people make the stock market rise."
"Scandals make people outraged."	"Outraged people seek out scandals."
"The availability of derivatives fosters a desire to speculate."	"A desire to speculate fosters the availability of derivatives."
"War makes people fearful & angry."	"Fearful and angry people make war."
"Epidemics cause society to be fearful and depressed."	"A depressed and fearful society is susceptible to epidemics."
"Happy music makes people smile."	"People who want to smile choose happy music."
"Nuclear bomb testing makes people nervous."	"Nervous people test nuclear bombs."
"The success of financial television spurred excitement among investors."	"Excited investors spurred the success of financial television."
"An expanding economy puts people in a good mood."	"People in a good mood generate an expanding economy."
"Falling markets make investors fearful."	"Fearful investors make markets fall."
"Good news makes stocks rise, and bad news makes them fall."	"Not so. These events just coincide sometimes."

TABLE 1. Contrasting Statements of Mechanical and Socionomic Causality

Robert Prechter continued

Education Lounge

subject and came out with *The Wave Principle of Human Social Behavior and the New Science of Socionomics* in 1999.

RW: If social mood governs social actions, including stock-market pricing, what governs social mood and why?

RP: Nothing external governs social mood. Social mood is an unconsciously shared mental disposition that arises in humans when they interact socially. It does not spread by contagion, it is not imparted by leaders, and it is not imposed by authorities. It arises holistically from mutual interaction, the way an economic marketplace does. Social mood predisposes members of society toward feeling and expressing through action certain characteristic sets of emotions. Humans' impulses to herd in contexts of uncertainty allow social mood free rein to prompt social actions.

Fluctuations in social mood regulate shifts in overall optimism and pessimism, which are recorded in stock averages. They adhere to a fractal structure, which is common to living forms. R.N. Elliott recognized this fact empirically, and Benoit Mandelbrot confirmed it mathematically. The Elliott wave model describes that structure.

RW: How does the Socionomic Theory of Finance (STF) provide a basis for technical analysis?

RP: Technicians, along with Graham-and-Dodd value analysts, have long operated under the belief that fully rational pricing and random walk are wrong and that the stock market provides buying and selling opportunities. They could not always convincingly explain, however, why markets provide such opportunities. STF offers a coherent depiction of financial market causality that justifies technicians' pursuits.

Neoclassical economists and Efficient Market Hypothesis (EMH) theorists believe that economic and financial causality are fundamentally the same, so they have long judged technicians to be delusional. If economic theory pertained to finance, they would be right. Think of it this way: Wouldn't it be crazy to study the past behavior of shoe prices as if they meant anything about future shoe prices? That's how conventional economists view technical analysis. Their view follows logically from the premise that the causes of stock pricing and shoe pricing are the same.

To eliminate this error, STF delineates a financial/economic dichotomy, which distinguishes between the field of (micro)economics, where the law of supply and demand applies within a paradigm of rational utility maximization and external causality, and the field of finance, where the law of patterned herding applies within a paradigm of pre-rational herding and internal

causality. Participants in an economic marketplace can consciously maximize the utility of their money because they are relatively certain about how they currently value things such as food, tools and vacations; participants in a financial marketplace unconsciously default to herding because they are perennially uncertain about how other people will later value things such as stock certificates, debt instruments, and cryptocurrencies. Unconscious processes aren't random but proceed according to mental defaults. For these reasons, financial markets display no evidence of equilibrium or mean reversion but rather produce dynamic patterns such as trends, bubbles, crashes, head-and-shoulders formations, and Elliott waves. Neoclassical economics and EMH use microeconomic causality for their financial model; STF proposes socionomic causality. Table 2 lists key differences between the two proposals.

Contrasting Models of Finance	
Neoclassical Theory and 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 stability (equilibrium) and revert to mean values.	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. Investors' decisions are based on knowledge and certainty.	4. Investors' decisions are fraught with ignorance and uncertainty.
5. Exogenous variables determine most investment decisions.	5. Endogenous social processes determine most investment decisions.
6. Financial prices derive from individual decisions about value.	6. Financial prices derive from herding activity and trends in social mood.
7. Financial price changes are essentially random.	7. Financial prices adhere to an organizing principle at the aggregate level.
8. Financial prices are unpredictable; the character of news is unpredictable.	8. Financial prices are probabilistically predictable; so is the character of news.
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.

© 1999-2016 Robert R. Prechter

TABLE 2. EMH vs. STF

Robert Prechter *continued*

Education Lounge

RW: The age-old debate about financial market theory continues, led by an affiliation with old-Newtonian based models. To what extent has there been a shift within the industry's mindset about exogenous-cause, rational-reaction theory, and how much support is your latest book receiving from academia, thus far?

RP: There has been little fundamental shift in theoretical orientation to date. What I see is an age-old oscillation. Behavioral finance was all the rage in the first decade of the 2000s but is less so now. Psychological hypotheses about markets were likewise prominent in the 1930s and 1940s but not so much in the 1950s and 1960s. Why is that? I think the trend of social mood determines which view is dominant. As social mood becomes more positive, the stock market rises, the economy grows, and observers increasingly embrace theories of exogenous cause and rational reaction. As social mood becomes more negative, the stock market falls, the economy contracts, and observers increasingly warm to theories of endogenous cause and non-rational action. When mood is positive, the world makes mechanical sense to people; when it's negative, they become confused and seek out alternative models.

This dynamic has played out clearly over the past two decades. In 1999, economists were among the most respected people on the planet. Time magazine put three of them on its cover. The profession was optimistic about the economic future, embraced the idea of rational financial pricing, and asserted that central bankers know how to control the economy, which is a staple of the exogenous-cause paradigm. That year, I was completing *The Wave Principle of Human Social Behavior*, which commented, "The extremity of today's bemusement toward the outmoded idea of social cycles is yet another signal of an approaching major social mood reversal and the beginning of a trend back toward a general interest in patterns of social behavior." Over the ensuing decade, social mood turned negative, so the stock market declined twice, the economy had two recessions, and behavioral finance became de rigueur, prompting a flood of new books about non-rational financial behavior. In 2002, behavioral finance pioneers Vernon Smith and Daniel Kahneman won the Nobel Prize in economics. By the end of the period, opinion about conventional economists had shifted 180 degrees. In April 2009, *Business Week* ran a cover asking, "What good are economists anyway?" and in July 2009, *The Economist* ran a cover showing that modern economic theory had suffered a meltdown. Many people thought the withdrawal of respect accorded economists at that time would be permanent. Since then, however, social mood has trended positively, so stocks have risen, the economy has expanded, and economists and their rational-market, exogenous-cause paradigm have regained their halos. It seems unlikely that this oscillation will ever cease. In each era, it seems hard to imagine that people could possibly return to the ideas then considered outmoded, but they always have.



What a difference a decade makes

Still, good ideas eventually make headway. I feel deeply honored that some brave leading lights in the areas of econophysics, behavioral finance, psychology, and applied mathematics have offered kind words about my book. Several professors have incorporated socionomics into their curricula. These things make me feel that there's hope.

RW: Professor Andrew Lo, of MIT University, has been a strong advocate of alternative financial market theories, and in his latest book, *Adaptive Markets*, he proposes a new model based on evolution. What synergies exist between the Adaptive Market Hypothesis (AMH) and STF, and in what fundamental way do they differ?

RP: I like theoreticians who think outside the box! On the other hand, adopting a model that works in another field can be problematic. Let's just look at some of the key differences between STF and evolutionary models so you can make up your own mind.

In 1950, Armen Alchian proposed that an economy's players succeed through evolutionary adaptation. In the realm of financial markets, George Soros (*The Alchemy of Finance*, 1987) proposed what he called "the principle of reflexivity," under which "investors['] belief[s] will change the way they invest, and that in turn will change the nature of the markets they are observing." He posited

Robert Prechter continued

Education Lounge

multiple feedback loops among investors' fallible logic, market action and external conditions. He said those interactions cause markets to evolve, often in unpredictable ways.

AMH comes to a similar conclusion through a more rigorous route. If I may summarize the introductory paper (Lo, 2004), AMH argues for the existence of distinct groups of market participants—including retail investors, market makers, hedge fund managers, and pension fund managers—who compete for scarce profit opportunities in the manner of different species competing for scarce resources, such as food and water, in a setting of economic motivation. It proposes that the investing strategies of these groups evolve through learning by way of positive and negative reinforcement, with the goal of achieving financial survival in an environment that constantly changes due to participating agents' own actions, which feed back into the system as new environmental causes, leading to evolutionary changes in markets, just as reflexivity theory has it.

STF agrees with Soros and Lo that financial pricing is subjective, that non-rational beliefs and habits are involved in the financial pricing process, and that humans' attitudes change economic and social conditions. Yet it does not embrace economic motivation, heterogeneous agency, reflexivity, adaptivity, profit-making knowledge evolution among speculators or any version of self-referential feedback mechanics.

Bear with me a moment, as this is a complex subject.

- Under STF, trading decisions made with reference to exogenous data do not fundamentally determine market behavior; rather, the market's mood determines people's interpretation of exogenous data as part of the process of rationalizing optimism or pessimism. As an example: A recent statistic showed that the economy grew at a 3% rate. Investors in an optimistic mood would declare it a strong quarter compared to a recent weak quarter, whereas investors in a pessimistic mood would say it is weak relative to past stronger quarters. You can see this effect among economists going back decades. I give an amusing example involving the trade deficit in *The Socionomic Theory of Finance*.
- STF recognizes no heterogeneous groups to which one can attach a multiple-species metaphor. It views speculators as members of a homogeneous group, whose aggregate behavior is motivated by its members' pre-rational herding impulses. Speculators' various market-related behaviors do not fit into distinct categories but fall along continua. There is a full range with respect to time horizons, degrees of experience, joining trends vs. looking for value, the application of fundamental vs. technical analysis, etc. This is

true not only among all speculators but also with respect to each individual speculator at different times.

- Under STF, economic and financial markets are fundamentally different and cannot be equated. Producers and consumers in economic markets on one hand and speculators in financial markets on the other perform two distinctly different roles. Competing for resources does help people thrive in economic markets, but the best way for most people to thrive when it comes to financial markets is to avoid them. Furthermore, financial profit opportunities are not scarce resources to be fought over, because no one uses them up; they are perpetually available to anyone, every minute of every day.
- Nature produces many successful species, but as far as I can tell, no class of speculator achieves long-run financial success, so there must be little in the way of adaptation, natural selection, or evolution going on within or among such groups. Consider that novices, large speculators, and even professional fund managers are all consistently wrong at market turns. As groups, they never learn. In 2008, even the captains of America's top investment banks, which had been in business for a hundred years, proved they had learned little about capturing profit opportunities when their firms faced bankruptcy. One such investment bank, which comprises some of the savviest financiers on the planet, wouldn't exist today had the government and the Fed not amended the rules so they could bail it out. The firm's lucrative ties to government are a successful adaptation, but that is an economic advantage provided by access to a rare resource; it has nothing to do with acquired wisdom about financial markets' profit opportunities.
- Under STF, the reason financial markets cannot evolve is that no group of speculators can entirely escape the primitive dynamic of pre-rational herding. So-called "Commercials," the only consistent winners in financial markets, are successful precisely because they are not speculating; I talk about that in Chapter 17.
- Under STF, there are no feedback loops between market actions and speculators' beliefs or between market actions and social conditions. The cause is unidirectional, from mood to beliefs to actions, which creates conditions.
- Theories involving reflexivity, feedback, adaptation and evolution view financial markets as qualitatively mutable. STF proposes that markets are qualitatively immutable and only quantitatively variable. Changes in markets that may seem like evolution—such as shifts in

Robert Prechter *continued*

Education Lounge

the degree of attention paid to various stock sectors or in the relative popularity of value investing vs. trend following—result from momentary changes of focus within the herd. Such shifts are not a matter of what but of how much.

Economists, physicists, biologists, psychoanalysts, game theorists, and complexity theorists have all applied their models to finance. These models serve their original purposes well but in my view are not fully transferable to financial markets. So, I think that evolution is evolution and finance is finance. One system does not successfully model the other. STF offers a theory of finance that is not based on some other field's model.

RW: Can technicians somehow apply aspects of STF and AMH together?

RP: I think the difference between them is too deep for that. As my colleague Wayne Parker used to say, "Eclecticism is dangerous." You can't mix incommensurate hypotheses; you have to choose one or the other. For example, Lo, Mamaysky, and Wang (2000) conducted a wonderful seminal study statistically validating the famous head and shoulders pattern (H&S) in financial markets. But think about it: If markets did evolve away from recognizable profit opportunities, then H&S, which signals a profit opportunity, could not be a consistent phenomenon. The pattern's efficacy—if not the pattern itself—would be repeatedly, if not permanently, obliterated by adaptation and evolution. In other words, it seems to me that to remain metatheoretically consistent, one can subscribe to either H&S or AMH, but not both.

RW: Mainstream macroeconomic and financial theories rely upon exogenous cause and rational reaction. So-called triggers for action include "information flow," "fundamentals," and various "catalysts," which can translate into high-impact events such as central bank policy, economic releases, or market shocks. How can the application of social mood concepts deal with these influences and help improve our analysis of the financial market?

RP: These concepts are borrowed from physics and chemistry and do not pertain to finance. Chapter 1 of *The Socionomic Theory of Finance*, titled "The Myth of Shocks," offers some convincing anecdotal evidence that backs up three exhaustive studies by other researchers demonstrating that even the most dramatic natural and social events do not serve as triggers or catalysts for moves in stock averages. Chapter 2 challenges 13 widely accepted claims of stock-market causality—involving interest rates, oil prices, central-bank activity, economic data, and so on—deriving from the exogenous-cause model. The evidence there surprises many people.

Chapter 23 on bubble theories specifically addresses the ideas of tipping points. In physics, tipping points imply hidden forces building to produce a singular event, typically a shift from one state of equilibrium to another. To begin with, financial markets have no such states of equilibrium. Their prices fluctuate up and down in a condition of perpetual dynamism, at all scales of observation. One would have to postulate an infinite number of tipping points, a formulation that would be devoid of explanatory or analytical value.

To analyze financial markets, you have to start with a model that recognizes the market's independence from exogenous causes. I think the proper model is waves of unconscious social mood that adhere to a hierarchical fractal, specifically the Elliott wave model.

RW: What do your key indicators signal about financial markets now, and how will conditions likely change from what we have experienced in this cycle?

RP: Optimistic market opinions, deep commitment to the stock market and its derivatives, extreme linear projections for higher prices, all-time-high levels of debt, and a persistent decline in debt quality all indicate that social mood today [submitted November 8, 2017—Ed.] is exceptionally positive. I recently displayed 40 sentiment indicators that are at or near all-time extremes. That fact does not tell you for certain where the stock market is going, however, because mood can get even more positive, a development I have observed numerous times. But it does suggest a condition of historically high risk in owning stocks and debt.

RW: Can we derive any socioeconomic conclusions about the social, political, and geopolitical landscape?

RP: Trends toward positive social mood lead to rising stock prices, economic expansion, relatively peaceful times and affirmative cultural expressions. Trends toward negative social mood lead to falling stock prices, economic contraction, social and political conflict and contrary cultural expressions. With that knowledge base, you can get a handle on the mood behind any social environment.

RW: Who should incorporate socioeconomic analysis?

RP: Socionomics is for people who want to understand the world around them. Our studies link social mood to some 50 human activities, including stock market trends, employment trends, election outcomes, wars, scandals,



Robert Prechter continued

Education Lounge

drug prohibition, epidemic disease, baby names, hemline heights (see Figure A), skyscraper construction, roller-coaster construction, nuclear weapons testing, procreation rates, automobile styling, automobile horsepower (see Figure B), the quality and popularity of movie genres, the activity of serial killers, and the fortunes of pop stars. If those things interest you, then read our two latest books, *Socionomic Studies of Society and Culture—How Social Mood Shapes Trends from Film to Fashion* and *Socionomic Causality in Politics—How Social Mood Influences Everything from Elections to Geopolitics*. These books are a lot of fun, and I think they could change the way you view the world.

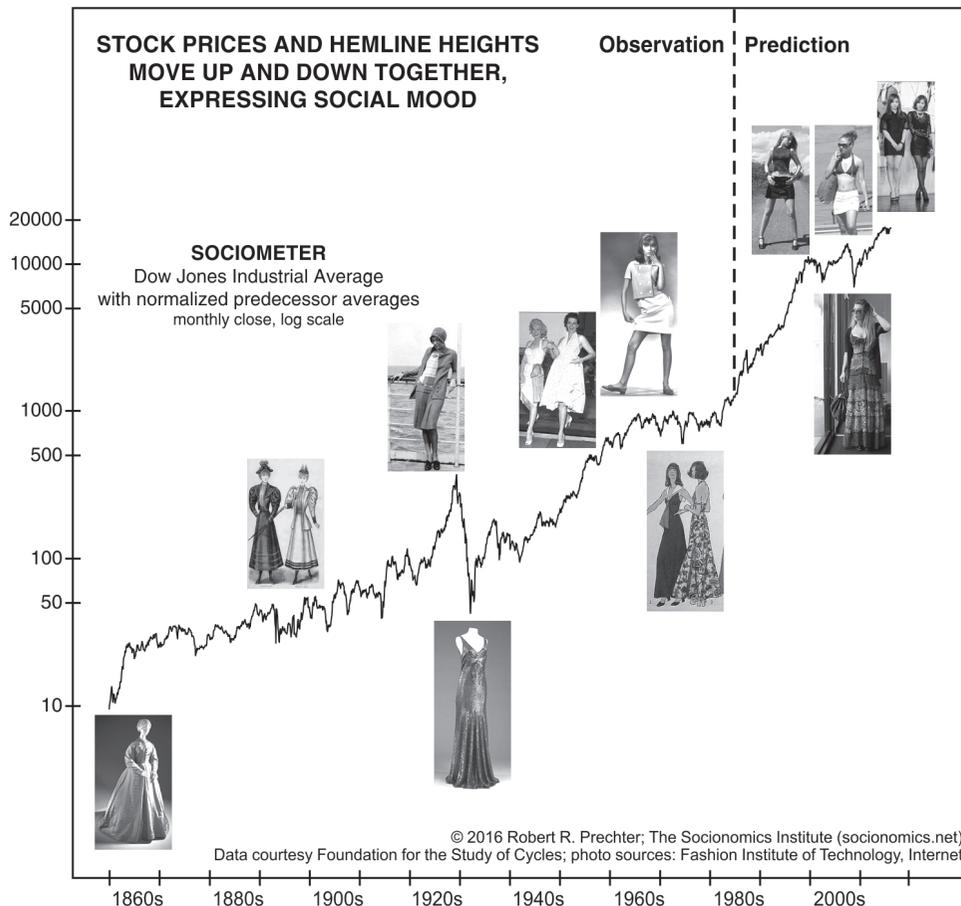


FIGURE A. Hemlines

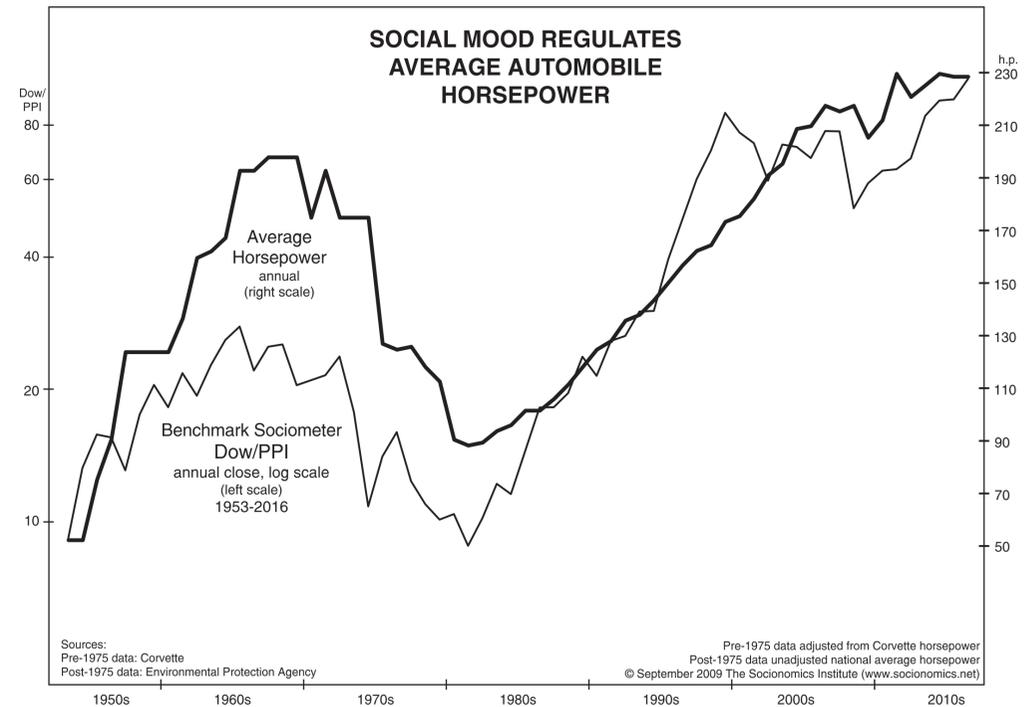
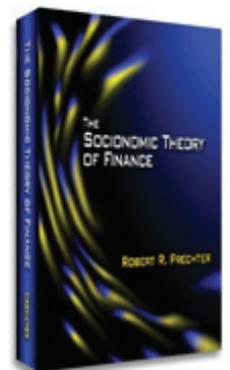


FIGURE B. Horsepower

RW: What would you recommend specifically for technicians and speculators to learn?

RP: Above all, they need to understand STF so they can avoid spending time and energy on peripheral matters that have little or no analytical value. This is not as simple as it sounds. It took me quite a few years to jettison all exogenous-cause assumptions because doing so is deeply counterintuitive. If you read just the first two chapters of *The Socionomic Theory of Finance*, you should be primed to go.

My next suggestion is to learn the Elliott wave model. It takes some practice, but it's worth it when the waves are clear. For an example of application in real time, read Chapter 22 of *The Socionomic Theory of Finance*, which contrasts 20 years of analysis in the oil market by five successive practitioners to supply-and-demand analysis from economists.



Robert Prechter continued

Education Lounge

Measures of breadth are helpful since specific wave labels imply certain breadths of participation among individual stocks, stock sectors, stock indexes, and—at the highest degrees—allied markets globally, and the two datasets should be compatible. I also recommend maintaining as many sentiment indicators as you can.

It is important to realize, though, that technical indicators cannot do the job alone because wave degrees determine how extreme those indicators will get. I had to learn that the hard way, too.

RW: I have seen some practitioners ignore the rules and guidelines of wave construction, and their posted work is a concern because it implies that the Elliott wave model is subjective. Is there a way to fix that problem?

RP: Yes, we have a solution. A team at Elliott Wave International spent several years developing an objective, hands-on test of wave-identification skills. It is entirely computer-administered and graded. It is a tough test, not easy to pass. At the last IFTA meeting, I met one person who had become a Certified Elliott Wave Analyst (CEWA) and another whose colleague did so. If you pass that test, you have proved to prospective clients or employers that you know the subject.

RW: What vision do you hold for the future of socio-economic study and the resources for its development?

RP: Well, I have spent about 20 years writing books and papers, making speeches and videos, hosting socioeconomics conferences, and launching a monthly publication called *The Socionomist*. My last two books completed a five-book set on socioeconomics.

One of my goals has been to write three papers that would show the way for further research. The first one would present the socioeconomic theory of finance, the next would contrast socioeconomic causality to standard causality statistically to provide a template for future research, and the third would be a comprehensive study validating the Elliott wave model. The first two are done and have been published in peer-reviewed journals. (They are: “The Financial/Economic Dichotomy in Social Behavioral Dynamics: The Socioeconomic Perspective” [2007; *Journal of Behavioral Finance*] and “Social Mood, Stock Market Performance and U.S. Presidential Re-Elections: A Socioeconomic Perspective on Voting Results” [2012; *SAGE Open*]; reprinted in *The Socioeconomic Theory of Finance* and *Socioeconomic Causality in Politics*, respectively, and available online on the Social Science Research Network [SSRN].—Ed.) I’ll be working with my son Elliott on the third paper, which is in the planning stage.

The Socioeconomics Institute is set to carry on without me, and it’s doing great. Lampert, Hayden, and Hall’s “Behavioral Finance Beyond the Markets: A Real-Time Case Study of Russia’s Military

Resurgence” was published in 2016 in the *Journal of Behavioral Finance & Economics*, and half a dozen other papers have been published or are in the works. But SI comprises only a handful of people, and there is a lot of work to do. The Socioeconomics Foundation offers grants to interested academics and welcomes anyone to help further the cause. Validation takes time, but we’re making it happen.

For more about socioeconomics, visit www.socioeconomics.net.

Related sites: www.robertprechter.com; www.elliottwave.com

Select [link](#) for “The Socioeconomic Theory of Finance” IFTA book review, authored by Robin Griffiths.



Ron William, CMT, MSTA, is an accomplished market strategist, educator, and trader with 18 years of financial industry experience, working for leading economic research and institutional firms and producing macro research and trading strategies. He specializes in macro, semi-discretionary analysis, driven by cycles and proprietary timing models.

Ron is a board member of the IFTA, part of its Education Committee, vice president and head of the Geneva Chapter of the Swiss Association of Market Technicians (SAMT), and honorary member of the Egyptian Society of Technical Analysts (ESTA). He holds both the MSTA and CMT professional designations. He is also co-founder of the SAMT CFTe Immersion Course. †

MFTA and CFTE Exam Dates

Certified Financial Technician (CFTE)—Level I

Date	Offered Year-round	
See our website for further instructions www.ifta.org/certifications/registration/		
Syllabus and Study Guide www.ifta.org/public/files/publication-downloads/IFTA_CFTE_Syllabus.pdf		

Certified Financial Technician (CFTE)—Level II

Date	19 Apr 2018	TBA Oct 2018
Registration deadline	9 Mar 2018	TBA
Register at www.ifta.org/register/cfte2.php		
Syllabus and Study Guide www.ifta.org/public/files/publication-downloads/IFTA_CFTE_Syllabus.pdf		
For more information on the CFTE program, visit www.ifta.org/certifications .		

Master of Financial Technical Analysis (MFTA)

	Session 1	Session 2
Alternative Path Pre-Application Deadline	28 Feb 2018	31 July 2018
Application/Outline Deadline	2 May 2018	2 Oct 2018
Paper Deadline	15 Oct 2018	15 Mar 2019
(Session 1) Register at www.ifta.org/register/mfta_alt_session1.php/		
(Session 2) Register at www.ifta.org/register/mfta_alt_session2.php/		

Congratulations New CFTEs!

Ahmad Lokman Abd Rahim (MATA)

Ahmad Helmi AbdulHalim (MATA)

Ron Albert Acoba

Ana Ahmad Faris (MATA)

Al Sherif Magdy Al Shater (ESTA)

Mohd Zaki Ali Amran (MATA)

Muhammad Maherilham Alias (MATA)

Fatimah Aljehani (AATI)

Hallima Nuriah Ameer Hamzah (MATA)

Shahrul Fadli Amzah (MATA)

Imran Bin Buang (MATA)

Sahil Anil Chhugani

Khiam Huat Gooi (STA)

Alberto Gordo Goya (IEATEC)

Matthew James Gosling (STA)

Shahrul Ezwan Ilias (MATA)

Lim Zi Ping Issaac

Ashyraf Amin Jamal Abdul Nasir (MATA)

Brandon Leu

Eric Liu

Nizar Maarouf

Zaleha Mat Hassan (MATA)

Mohd Fikri Nabil Mohd Bakri (MATA)

Zulnureen Mohd Shariff (MATA)

Ivan Hernando Scherman

Faisal Mohd Zain (MATA)

Mohd Shaquail Haziq Mohd Zubil (MATA)

Zul Iman Muhammad (MATA)

Chin Mai Ng (Theresa) (STA)

Maria Krishna Pabalan-Abello (NTAA)

Gagandip Pannu (STA)

Hanan Rozaimée (MATA)

Robert Francis Schwagerl

Siti Humairah Shahir (MATA)

Wei-Lun Shih (TSAASF)

Syed Hidayat Syed Hassan (MATA)

Kamarul Haizat Tukiman @ Jemain (MATA)

Wan Nur Salina Wan Ibrahim (STA)

Muhammad Fawwaz Zakaria (MATA)

Syed Zahid Zakaria (MATA)

Bloomberg

With a wide range of advanced trading services and its long-standing experience in the Italian trading and investment world, Webank and its trading platform are a landmark in Italy for quality, completeness and ease of use.

Webank's offer in trading and investment services is one of the **broadest** available on the **online trading market and meets the needs of investors and the most demanding** traders.

Webank: a wide selection of trading platforms tailored to investors' needs:

- **Web platform**, recommended for all investors who need in-depth fundamental analysis and quick access to detailed information on all world markets and their performance;
- **T3 platform** for all traders requiring a fast and reliable platform to grasp market opportunities. Also available in "No Frame" version designed for multi-monitor systems;
- **T3 Open**, the platform to connect with third-party software;
- **T3 Apps for iOS and Android tablets**, to trade with mobile devices with the same functions available on home computers.



Webank is key to access and trade on the main world **equity markets** (Italian, French, German, Belgian, Dutch, Spanish, English and US) as well as **bond markets** (MOT, EuroTLX, Hi-MTF and OTC) in addition to **derivative markets** (IDEM, Eurex and CME).

With Webank the most demanding traders can maximize their online trading experience through a wide range of leading edge services



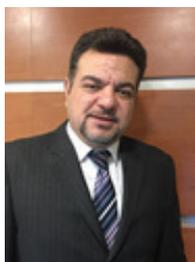
- **Intra-day margining**, with customized financial leverage up to 2,000% to take advantage of the smallest market fluctuations;
- **Overnight margining** aimed at extending the bullish or bearish trends;
- **Margining on derivative instruments** for trading the major futures listed on all world markets with initial intra-day margins, reduced up to 20%;
- **Advanced, fully customizable graphics** with over 70 indicators, also to backtest one's trading strategies based on technical analysis signals.

To provide additional services to investors, Webank offers an innovative tool that generates investment model portfolios based on a simple questionnaire on investment needs. This service known as "What type of Investor are you?" ranked first in the category of "Wealth Management Products and Services" at the "AIFIn "Cerchio d'oro dell' innovazione finanziaria" (Golden Circle Award for Financial Innovation - Italian Award") in February 2017.

The attention to its customers' ongoing financial training has always been a key factor in Webank's market approach, strategy and customer care. As a matter of fact, since 2010, more than 600 Webank events and webinars have focused on a gamut of financial topics with the active participation of highly qualified and famous speakers and professional traders.

Congratulations New IFTA Board Members (Term October 2017 – October 2020)

Tamer Gamal, CFTe, CETA



Tamer Gamal is currently the head of Arab African International Securities (AAIS) Technical Analysis Research, a subsidiary of Arab African Bank (AAB). In this capacity, he educates institutional and individual clients on the merits of technical analysis and why AAIS utilizes a technical rules-based model to oversee clients' requirements.

With a background in engineering, Tamer joined the financial markets industry in 1998 through equity/currency trading and private portfolio management. He joined the AAIS team in 2007. In 2011, Tamer was elected chairman of board of the Egyptian Society of Technical analysts (ESTA), following three years as an ESTA board member. In 2008, he was awarded the Bronwen Wood Memorial Award by IFTA.

Tamer is a regular contributor to many local journals and TV shows. He is often interviewed in *Bloomberg*, *Reuters*, and *Business Monthly* (American Chamber of Commerce) and conducts live sessions.

Ir. Abdul Wahid Bin Jantan, CPEng



Abdul Wahid Bin Jantan is principal consultant of AWJ Consulting and president and CEO of Pegasus Resources Sdn Bhd. He began his career as a petroleum refinery engineer with CONOCO Oil Refinery in Humberside,

England. He later joined Merrill Lynch as a trader in energy, commodities, currencies, and financial futures. Following this, he joined Telerate AP–Dow Jones and then went on to work for REUTERS Ltd. in its business, financial information, and IT sectors. He was the managing director of Asia-Pacific Petroleum Refining Corp Ltd (APRC) and was appointed as consultant and head of corporate and institutional financing of Bank Islam Malaysia.

Abdul has conducted research and created a leading method determining probable time of occurrence on market activity, called “Wahid TO,” and the complex financial forecast modeling for longer term views—AWJ Elliott Wave method, both of which are used by fund managers, Forex dealers, corporate treasurers, analysts, and oil traders.

Abdul graduated with a B.Sc. in chemical engineering and holds an MBA and CPEng. He is an honorary fellow of the Malaysian Association of Technical Analysts.

IFTA Journal 2018 – Now Available!

We are pleased to announce that the 2018 IFTA Journal is now available for viewing and download from the [IFTA website](#). Please share with your society colleagues and/or post to your website.

Inside this issue:

MFTA Papers

- Consensus Ratio and Two-Steps Selection to Detect Profitable Stocks
- The K-Divergence: A Non-Conventional Theory on Gaps--When are They Significant and How to Trade them Profitably
- M-Oscillator
- Is There Smart Beta in Indicators of Technical Analysis?

Articles

- Time Cycle Oscillators
- Key Performance Indicator
- Magic Cycles and Where Not to Find Them: Empirical Analysis of Discrete Cycles in Daily Stock Charts
- How to Combine Trading Signals

2017 NAAIM Wagner Award Winner

- Achieve Your Goals More Often: A Case for Active Allocation

Throw off the blowlines, sail away from the safe harbour: Explore. Dream. Discover.
—Mark Twain 🚩



IFTA Journal Call for Submissions

The *IFTA Journal* is an annual publication established by the International Federation of Technical Analysts. It is collated by a committee of IFTA colleagues. The *IFTA Journal* is essential reading for academics, students, and practitioners of technical analysis in all arenas. It is an excellent reference for anyone interested in technical analysis, containing a wealth of resource material.

Credibility and Recognition

The *IFTA Journal* is the only international journal with original contributions from all continents covering developments in technical analysis in global markets. The *Journal* reaches leading practitioners and students of technical analysis throughout the world.

The *IFTA Journal* is a major professional resource. Its archival online publication on the IFTA website will make your original work available as a future resource to the worldwide community of technical analysts.

Topics

IFTA is seeking papers that cover developments impacting, either directly or indirectly, the field of technical analysis; they may be drawn from such areas as:

- Basic market analysis techniques
- Indicators—sentiment, volume analysis, momentum, etc.
- Global and intraglobal technical analysis
- Styles of technical analysis
- Data
- The changing role of technical analysis in the investment community

We would especially like to see contributions that draw from areas not previously examined and/or topics tangential to technical analysis.

The above list is just a guide and should in no way be considered restrictive. We wish to make the *Journal* open to new and innovative ideas from all areas of technical analysis and those that connect with it.

Submitting Contributions

Registration and submission of contributions is online via <http://www.ifta.org>, or by email to the editor, Aurélia Gerber, journal@ifta.org.

Language

Contributions must be submitted in English, with British grammar required.

Writing Style

Papers should be written in a thesis style. A guidance can be found at the following link:

http://www.ifta.org/public/files/publication-downloads/MFTA_Thesis_IFTA_Journal_Guide.pdf

Referencing

All texts referred to in the paper must be appropriately referenced in a list of "References" at the end of the text. Further all notes are to be included as endnotes ("Notes"). A Bibliography is not to be included.

The author is responsible for the accuracy of references and quotations. We expect the author to check them thoroughly before submission.

Figures, Charts, and Tables

Illustrations and charts must be referred to by figure number and source. Tables must be referred to by table number and source.

Length of Contribution

Papers should be approximately 1,200 to 3,000 words, with supporting graphs and charts.

Format

We ask for submissions in MS Word or other text format, as well as a PDF. Charts and graphs may be in

.GIF or .JPG, but we ask that authors also keep a .TIF format in case it is required for printing purposes. An Excel spreadsheet supporting your submission may also be included.

Licenses and Copyright

We require all submissions to include the author's signature on the Publication Agreement at the end of this document.

We may publish online. We require that you place your submission under the Creative Commons Attribution-NonCommercial 3.0.

Unless another license is noted, we will assume that your contribution is under this license.

Editorial Timeline

December 13	Call for papers distributed
.....
May 31	Deadline for all submissions
.....
May 31	Papers distributed for review
.....
July 31	Reviewer's comments returned to editor
.....
August 15	Notification of acceptance/rejection
.....
August 31	Submission to printer
.....
October	Worldwide distribution
.....
December	Web publication

For more information, see our website www.ifta.org/publications/journal/.

IFTA Member Societies

AUSTRALIA—ATAA Australian Technical Analysts Association www.ataa.asn.au
 CANADA—CSTA Canadian Society of Technical Analysts www.csta.org
 EGYPT—ESTA Egyptian Society of Technical Analysts www.estaegypt.org
 FRANCE—AFATE Association Française des Analystes Techniques www.afate.com
 GERMANY—VTAD Vereinigung der Technischer Analysten Deutschlands e.V. www.vtad.de
 GHANA—BSG* Bastiat Society Ghana <https://bastiatghana.org>
 HONG KONG—FTAA Financial Technical Analysts Association www.ftaa.org.hk
 INDIA—ATA Association of Technical Analysts www.ataindia.in
 INDIA—ATMA* Association of Technical Market Analysts www.atma.ac
 INDONESIA—AATI Asosiasi Analis Teknikal Indonesia
 ITALY—SIAT Società Italiana di Analisi Tecnica www.siat.org
 JAPAN—NTAA Nippon Technical Analysts Association www.ntaa.org.jp
 LEBANON—LSTA Lebanese Society of Technical Analysts www.lstalebanon.com
 MALAYSIA—MATA Malaysia Malaysian Association of Technical Analysts www.malaysianchartist.com
 NEW ZEALAND—STANZ Society of Technical Analysts of New Zealand www.stanz.co.nz
 NIGERIA—TASN Technical Analysts Society, Nigeria www.tasnigeria.org
 ROMANIA—AATROM Asociatia Analistilor Tehnici din Romania www.aatrom.org
 SCANDINAVIA—STAF Skandinavien Tekniska Analytikernas Förening www.staf.nu
 SINGAPORE—TASS Technical Analysts Society (Singapore) www.tass.org.sg
 SOUTH AFRICA—TASSA Technical Analysts Society of Southern Africa www.tassa.org.za
 SPAIN—IEATEC Instituto Español de Analistas Técnicos y Cuantitativos www.ieatec.es
 SWITZERLAND—SAMT Swiss Association of Market Technicians www.samt-org.ch
 UNITED KINGDOM—STA Society of Technical Analysts Ltd. www.sta-uk.org
 USA—TSAASF Technical Securities Analysts Association www.tsaasf.org
 USA—AAPTA American Association of Professional Technical Analysts www.aapta.com

*Developing

IFTA Update Schedule

The *IFTA Update* is the quarterly electronic newsletter of the International Federation of Technical Analysts, reaching more than 7,000+ IFTA colleagues worldwide. The *Update* is an efficient and cost-effective way to communicate with IFTA's member societies and colleagues.

PUBLICATION SCHEDULE

March Issue..... Education articles: February 15..... All other content: March 1
 June Issue..... Education articles: May 15..... All other content: June 1
 September Issue..... Education articles: August 15..... All other content: September 1
 December Issue..... Education articles: November 15..... All other content: December 1

Send education article submissions to newsletter@ifta.org. Send all other content to admin@ifta.org
 For more information and to advertise, visit our website: www.ifta.org/publications/newsletter/

Board of Directors

President Mohamed El Saaid, MFTA, CFTe (ESTA)
m.elsaaid@gmail.com

Vice President Middle East and Africa Tamer Gamel Edin Hassan (ESTA)
tgamal@gmail.com

Vice President Europe Simon Warren, MSTA, CFTe (STA)
simonwarren18@gmail.com

Vice President Americas Jeanette Anne Schwarz-Young, CFP®, CMT, M.S. CFTe (AAPTA)
optnqueen@aol.com

Vice President Asia-Pacific Affairs Akihiro Niimi, MFTA, CFTe (NTAA)
niimia@aifam.jp

Treasurer and Website Director Karin Roller, CFTe (VTAD)
karin.roller@vtad.de

Director Francesco Caruso, MFTA (SIAT)
info@cicliemercati.it

Conference Director Ir. Abdul Wahid Bin Jantan, CPEng (MATA)
ajwahid@awjpegasus.com

Development Director Ron William, MSTA, CMT (SAMT)
ron.william@samt-org.ch

Education Director Gregor Bauer, Ph.D., CFTe (VTAD)
gregor.bauer@vtad.de

Examination Director Saleh Nasser, CFTe, CMT (ESTA)
saleh.nasser@pharosholding.com

Secretary, Development Director and Asia-Pacific Affairs Takashi Nakamura, MFTA, CFTe (NTAA)
nakamtak@mse.biglobe.ne.jp

Journal and Newsletter Director Aurélia Gerber, MFTA, MBA, CFA (SAMT)
aurelia.gerber@ifta.org

Membership Director Alek Jankowski, BE, M.Eng.Sc., Grad.Dip.Mgt. (ATAA)
Alek.Jankowski@ATAA.asn.au

Marketing and Webinar Director Tom Hicks (STA)
tom.hicks@live.co.uk

Staff

Executive Director Beth W. Palys, FASAE, CAE
Senior Vice President, Meetings Grace L. Jan, CAE, CMP
Senior Member Services Manager Linda Bernetich, CAE
Marketing Manager Julie Hill
Accounting Dawn Rosenfeld
Editor Lynne Agoston

IFTA HEADQUARTERS

International Federation of Technical Analysts
 9707 Key West Avenue, Suite 100
 Rockville, MD 20850 USA

Phone: +1 (240) 404-6508
 Fax: +1 (301) 990-9771
 Email: admin@ifta.org