

## Perspective: The Markets, Genetic Algorithms & Relative Risk

Jan 04, 2017

Dear Scott,

### Trumped Up Markets

While there was a bit of selling just before the New Year, it appears it was more about tax-loss harvesting and taking money off the table in fears of a possible terrorist attack as the world partied. However, the first two trading days of the year seem to confirm that confidence in the economy continues and is growing. That said, it is typical for the market to sag a bit before the inauguration, then perk up with renewed enthusiasm for a while only to sag again until the new policies actually roll out and meaningfully impact on the economy.

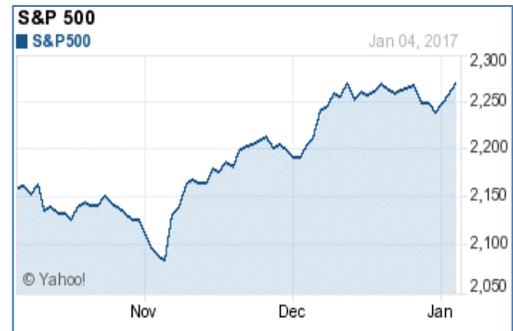
Two interesting reasons for more than usual optimism relate to reduction in corporate taxes and repatriation of an estimated \$2.5 trillion in cash held by corporations overseas. The simple act of reducing corporate taxes results in an instant increase in net earnings estimated to be worth about 15%. All of a sudden, instead of talking about Dow 20,000, we are talking about Dow 23,000 for the same P/E ratio. If the better part of \$2.5 trillion is repatriated, corporations are more likely to invest the capital in some combination of product development, production efficiency, market development, or simply improve share price with stock buy-backs if other opportunities appear poor. So long as the prospects for enacting these appear close at hand, optimism will likely keep the market juiced.

### Genetic Algorithms that Design Strategies –(Impressive)

By: [Stewart Wilson, Ph.D. President, Prediction Dynamics](#)

As a user of SectorSurfer I have marveled at the ability of some people to create high-performance Strategies. It's a talent I don't seem to have. But I do have a background in evolutionary computation and thought it might be possible to evolve good Strategies automatically with a genetic algorithm. Such algorithms are modeled after biological processes in which mutation, crossover and selection enable a population to evolve from generation to generation.

By employing information from the SectorSurfer website, and Scott's suggestions, I first made an approximate simulation of the SectorSurfer algorithm to evaluate fitness of the population. Next I wrote the algorithm for the problem of drawing 12 funds from the universe of 40 Fidelity Select sector funds. The best evolved combinations were then tested on the SectorSurfer site. Quite rapidly, it found



3-Months



2-Years

### About Stewart W. Wilson, Ph.D.

#### About Stewart Wilson

Stewart's research career commenced at the Massachusetts Institute of Technology (MIT), where he received an S.B. degree in physics and an S.M. and PhD degree in electrical engineering. After having completed his formal education, research work at the Polaroid Corporation (starting in 1962) and the Rowland Institute for Science (starting in 1983) led him to the development of practically useful, yet highly complex, biologically-inspired systems and machine learning architectures. In 1996 he founded the research and consultancy company Prediction Dynamics. Since 1999 he has been an adjunct professor at the University of Illinois at Urbana-Champaign, IL. In April of 2012 Stewart discovered SectorSurfer and found a compelling new hobby.



[Click to enlarge.](#)

better Strategies than what I could do by hand. Numerous complex subtleties were overcome to reach Scores ranking high in the Hall of Fame.

The Strategy [GA\\_161125.74](#) is a genetically evolved Strategy and is currently #13 in the Hall of Fame — although it would actually have ranked #3 with a Score of 123.5 as it was originally evolved had it not been forced to add FWPT per HoF listing rules, which slightly degraded its score. While, there are several Strategies to go before the summit, it seems possible that the algorithm will eventually be able to find those strategies, as well as make better ones.

Still, there's much to be done, but I believe that the evolutionary generation of Strategies could well increase the number and diversity of high-quality Strategies available. In addition, evolutionary Strategy generation inherently permits automatic Strategy updates as markets shift.

**Wealthy Doctor Institute vs. Yale's David Swenson**  
 Dr. David Yeh, MD, founder of the [Wealthy Doctor Institute](#) and author of [The Busy Doctor's Investment Guide](#) produces a monthly video for his clients and often discusses SectorSurfer. In this month's video, Dr. Yeh examines the portfolio that Yale's legendary endowment fund manager, David Swenson, recommends for his own family. The typical asset allocation weighted Modern Portfolio Theory design is first evaluated, and then it is compared to what SectorSurfer can do with those same funds. It's worth watching to see the stark contrast. The best part starts at the 18 minute mark.

**"Relative Risk" to Replace "Safety?" — Please Vote!**  
 I would like to propose that the SectorSurfer measure of Safety be replaced with a much better measure called Relative Risk. A detailed description of it and examples of its use can be found in our new White Paper entitled "Satisfying the Prudent Man," — the topic of last November's streamed Meetup, and can be downloaded by clicking its image (right). I highly recommend at least browsing the article. Please let me know if you agree that Relative Risk should replace Safety as reported on the charts. In the Hall of Fame, I would likely replace the Safety category with the Sortino for similar reasons. The Safety value would still be reported on the CSV spreadsheet download. Shall we do it?

**ETF and Stock Strategies for a Trump Administration**  
 (Tues. Jan 10<sup>th</sup>: Streamed @ <https://join.me/SectorSurfer> )  
 Like him or not, his agenda will have a profound effect on the fortunes of many sectors and companies the next few years. His election surprise is the poster child for this statement: "Although we must endure punctuated events that shock markets unpredictably, they do lead to new trends that can be profitably employed." Thus, a diligent investor would construct strategies that are sure to include sectors and companies likely to prosper under a Trump



**Dr. Yeh Compares SectorSurfer to Yale's Legendary David Swenson Portfolio**



**Stock Strategies for a Trump Admin.**  
 Streamed Live January 10th, 7PM PST

administration. We will briefly review a few ETF Strategies, but primarily focus on the techniques required for creating well-performing, legitimate stock Strategies with aggregate performance in a portfolio, such as [This Sneak Preview](#). For more information about this Meetup group, please [See These Details](#).

Surf Well and Prosper,



**Scott Juds**  
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## Additional Resources

**Sector Surfer**  
**Live Forum**  
*By the Seattle SectorSurfers Meetup Group*



The SectorSurfer Live Forum provides Internet-streamed access to the Seattle SectorSurfers Momentum Investing Meetup Group so everyone can attend the presentations and discussions hosted by Chief SectorSurfer. [Click HERE](#)

**Sector Surfer**  
**Users Group**  
*Join the Conversation*



The SectorSurfer Users Group is an online Google Groups Forum created by Joe Gruender of San Jose, CA to provide a platform for exchanging strategies, ideas and learning from the experience of other SectorSurfers. [Click HERE](#)

 **ALPHADROID**  
STRATEGIES  
*Professional Help - Change the Game*



Bryan Sullivan founded AlphaDroid Strategies to provide True Sector Rotation and StormGuard technology to financial advisors in a framework that helps them manage high performance portfolios for their clients. [Click HERE](#)