

Black Box Store
Rodeo Drive, Beverly Hills

Don Gimpel - August 2014

This is not a seminar ...

- All I asked for was a couple of minutes of your time to present a few semi-organized ideas.
- What if Scott Judd is walking across the street in front of Pike's Market in Seattle where he is flattened by a runaway logging truck carrying enormous sections of a giant redwood tree.
- I'm not suggesting that this would happen but it might and then what do you think would happen to SumGrowth.com
- Please begin to worry right now.

This is just the way I am ...

- I am a habitual worrier.
- Most of what I worry about never happens but every once in a while something does.
- I worry about Sector surfer's black box for then what do I do.
- It's a good idea to have an insurance policy just in case.

That's what these few words are all about.

UltraFS disappeared ... why

I grew to depend upon UltraFS.

- It was transparent and powerful.
- It had sophisticated timing strategies that yielded 30% or more per year.
- So why did it disappear?

The point is that it can happen to any service or software. They come and then they go.

Can it happen to SumGrowth ...

- Sure it can!
- What will you do then because SumGrowth is not transparent ... it has a built in black box and you don't know what is going on in that box.
- I think I have a clue and just might know how to build my own box just in case its needed.

What does the black box do?

- The black box calculates the short-term (local) slope of the price curve and is reported to minimize noisy data so that you get a true representation of what is taking place.
- The data isn't noisy. It is what it exactly is. What's noisy is its ability to fit the price curve whatever that is.
- How do you fix that?

The standard way is ...

- You can calculate the slope of the “best fit” line through the data set.
- What do you do if the data does not represent a straight line as is the case with securities?
- You use a function that is a better representation!
- Through compounding, most price curves are exponential in shape so ...

Then you use the “handy-dandy” obscure Excel functions ...

Assume that the best representation for the price line is Ck^n where C and k are to be determined.

We are to minimize the squared error:

$$E(Ck) = \sum (y_n - Ck^n)^2$$

LOGEST A function that returns the parameters of an exponential trend for a supplied set of x and y .

INDEX Returns a reference to a cell (or range of cells) for requested rows and columns within a supplied range.

More math stuff ...

The EXCEL functions that returns the best fit line parameters c and k are:

$$k = \text{INDEX}(\text{LOGEST}(y_n, n), 1)$$

$$C = \text{INDEX}(\text{LOGEST}(y_n, n), 2)$$

Where to find the stuff ...

No problem – just do what I did and go to:

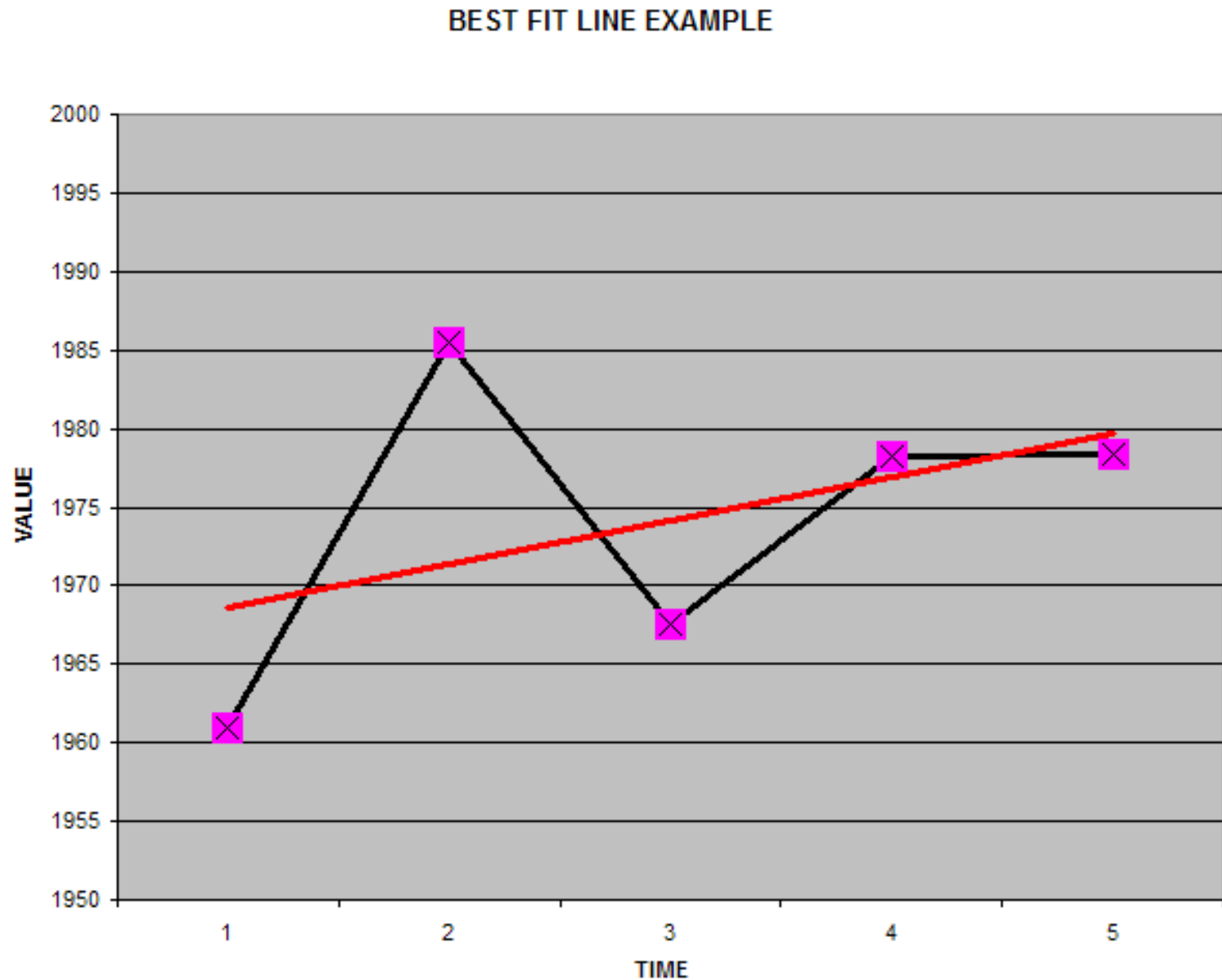
<http://www.financialwisdomforum.org/gummy-stuff/best-fit.htm>

You will find: “Best fit to stock prices”

Maybe you would like an example ...

F	G	H	I	J	K	L
	C	1968.565	=INDEX(LOGEST(H10:H14,G10:G14),2)			
	k	1.001401	=INDEX(LOGEST(H10:H14,G10:G14),1)			
	Date	Data	Best Fit			
	0	1960.96	1968.565			
	1	1985.44	1971.324			
	2	1967.57	1974.087			
	3	1978.22	1976.853			
	4	1978.34	1979.624			

And a graph ... weekly July S&P 500



You can do another thing ...

The equation $C = k^n$ for $n = 0$ to 4 is the best fit to the recent past. By using $n = 5, 6, 7, 8$ you calculate the curve for the next 4 weeks, the future. You don't really have to do it if all you are interested in is ranking investments because you already have the set of k 's.

Another nice thing about this is that if $k > 1$, the curve is concave up which is what you want for an investment.

Maybe we had better sum it up.

1. You can use Investor's FastTrack as the data source.
2. You create a family of funds that comprise a SumGrowth strategy.
3. Export the last 5 weeks (or whatever) weekly closing dates prices to an Excel spreadsheet.
4. Use the function to compute "k".
5. Pick the investment with the highest value of k.
6. You can do this whenever you like.

You might also want to read:

“Correlation: what is it?”

<http://www.financialwisdomforum.org/gummy-stuff/investing-2.htm>

“Correlations”

<http://www.financialwisdomforum.org/gummy-stuff/correlation2.htm>

“Serial Correlation

<http://www.financialwisdomforum.org/gummy-stuff/serial-correlation.htm>

One More ...

“The ‘Best Fit’ to some (x_n, y_n) data

<http://www.financialwisdomforum.org/gummy-stuff/best-fit.htm>

Does this imply that I recommend that you do this?

What I'm saying is that you can do this just in case but it probably makes a lot more sense to pay SumGrowth a few bucks a month to do the horse work for you.

Knowing that you can do it for yourself "just in case" is actually an argument for using SumGrowth because you know you can sleep at night one way for the other.

Please raise your hand if ...

- There may be someone in this audience who would like to continue this train of thought and volunteer their time and expertise to explore this topic. The goal, as always, is to make some money.
- If you are that person, contact me at the end of the meeting.
- You should have good skills in designing Excel macros, a generous heart and a willingness to share.

Portfolio Visualizer

Portfolio Visualizer offers a set tools for analyzing multi-asset class portfolios and the benefits of asset class diversification and multi-factor investing. The portfolio backtesting tools support both historical asset class returns and realized returns from US mutual funds, ETFs and stocks. In addition the site provides analytical tools for Fama-French factor analysis, Monte Carlo simulation, visualizing efficient frontiers, asset correlation testing and comparing timing models.

[View Examples »](#)

Backtest Portfolio

Backtest a portfolio asset allocation and compare historical and realized returns against various lazy portfolios.

[View details »](#)

Factor Analysis

Run Fama-French three or four factor model analysis for one or more assets to analyze returns against market, size, value and momentum factors.

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Asset Correlations

View correlations for asset classes and selected tickers including rolling correlations over time.

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Monte Carlo Simulation

Run Monte Carlo simulations for the specified asset allocation.

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Efficient Frontiers

Visualize efficient frontier for any two asset classes for the specified time period.

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Timing Models

Test timing models based on moving averages, momentum and Shiller PE ratio (PE10).

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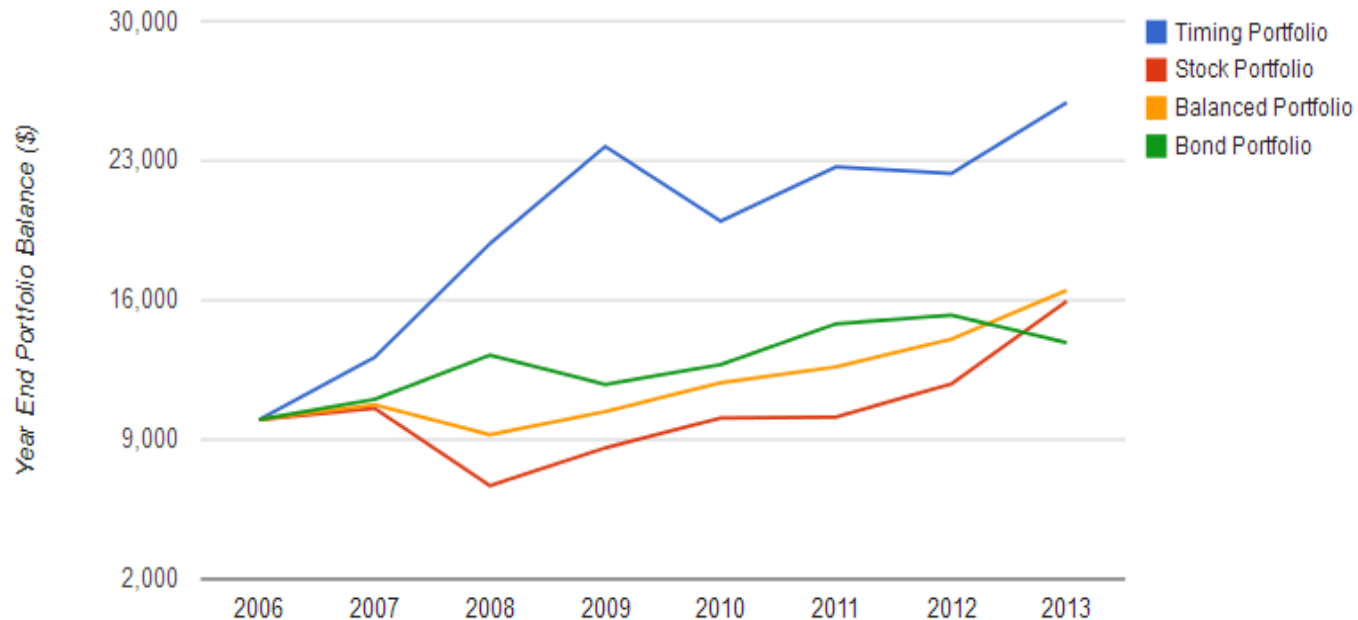
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Portfolio	Initial Balance	Final Balance	CAGR	StdDev	Best Year	Worst Year	Max. Drawdown	Sharpe Ratio
Timing Portfolio	\$10,000	\$25,910	14.57%	20.04%	43.50%	-15.81%	-24.13%	0.75
Stock Portfolio	\$10,000	\$15,937	6.88%	23.66%	35.18%	-36.74%	-50.39%	0.36
Balanced Portfolio	\$10,000	\$16,488	7.41%	10.33%	17.47%	-14.01%	-25.68%	0.67
Bond Portfolio	\$10,000	\$13,859	4.77%	11.91%	20.10%	-11.12%	-11.12%	0.37

Portfolio Growth



Perturbation studies ...

You can perform manual perturbation studies with Portfolio Visualizer Market Timing Module varying:

Years

Months to establish momentum

Assets held

Trading frequency (monthly, etc.)

The background is a solid blue color. A white curved line starts from the top left and curves downwards towards the center. A white triangular shape is positioned in the lower right quadrant, with its hypotenuse facing the center. The text "Thank You, Richard Young!" is centered horizontally and partially overlaid by the white shapes.

Thank You, Richard Young!